

CA204  
EAB  
- H26 v. 16

# ENVIRONMENTAL ASSESSMENT BOARD

VOLUME: XVI

DATE: Thursday, June 16th, 1988

BEFORE:

M.I. JEFFERY, Q.C., Chairman

E. MARTEL, Member

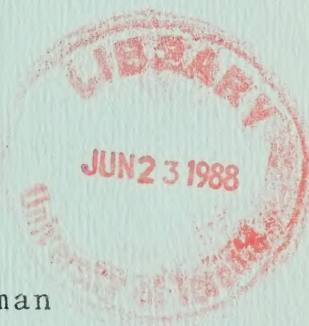
A. KOVEN, Member

FOR HEARING UPDATES CALL (TOLL-FREE): 1-800-387-8810

**EARR &**  
ASSOCIATES  
REPORTING INC.

(416) 482-3277

2300 Yonge St., Suite 709, Toronto, Canada M4P 1E4









HEARING ON THE PROPOSAL BY THE MINISTRY OF NATURAL  
RESOURCES FOR A CLASS ENVIRONMENTAL ASSESSMENT FOR  
TIMBER MANAGEMENT ON CROWN LANDS IN ONTARIO

IN THE MATTER of the Environmental  
Assessment Act, R.S.O. 1980, c.140;

- and -

IN THE MATTER of the Class Environmental  
Assessment for Timber Management on Crown  
Lands in Ontario;

- and -

IN THE MATTER of an Order-in-Council  
(O.C. 2449/87) authorizing the  
Environmental Assessment Board to  
administer a funding program, in  
connection with the environmental  
assessment hearing with respect to the  
Timber Management Class  
Environmental Assessment, and to  
distribute funds to qualified  
participants.

-----  
Hearing held at the Ramada Prince Arthur  
Hotel, 17 North Cumberland St.  
Thunder Bay, Ontario, on Thursday  
June 16th, 1988, commencing  
at 9:30 a.m.

-----  
VOLUME XVI

BEFORE:

MR. MICHAEL I. JEFFERY, Q.C.	Chairman
MR. ELIE MARTEL	Member
MRS. ANNE KOVEN	Member






A P P E A R A N C E S

MR. V. FREIDIN )	MINISTRY OF NATURAL
MS. C. BLASTORAH)	RESOURCES
MS. K. MURPHY )	
MR. B. CAMPBELL)	MINISTRY OF ENVIRONMENT
MS. J. SEABORN )	
MR. R. TUER )	ONTARIO FOREST INDUSTRY
MR. R. COSMAN )	ASSOCIATION and ONTARIO
MS. E. CRONK )	LUMBER MANUFACTURING
MR. P.R. CASSIDY)	ASSOCIATION
MR. J. WILLIAMS	ONTARIO FEDERATION OF
	ANGLERS & HUNTERS
MR. D. HUNTER	NISHNAWBE-ASKI NATION
	and WINDIGO TRIBAL
	COUNCIL
MR. J.F. CASTRILLI)	
MS. M. SWENARCHUK )	FORESTS FOR TOMORROW
MR. R. LINDGREN )	
MR. P. SANFORD )	KIMBERLY-CLARK OF CANADA
MS. L. NICHOLLS)	LIMITED and SPRUCE FALLS
MR. D. WOOD )	POWER & PAPER COMPANY
MR. D. MacDONALD	ONTARIO FEDERATION OF
	LABOUR
MR. R. COTTON	BOISE CASCADE OF CANADA
	LTD.
MR. Y. GERVAIS)	ONTARIO TRAPPERS
MR. R. BARNES )	ASSOCIATION
MR. R. EDWARDS )	NORTHERN ONTARIO TOURIST
MR. B. McKERCHER)	OUTFITTERS ASSOCIATION
MR. L. GREENSPOON)	NORTHWATCH
MS. B. LLOYD )	





Digitized by the Internet Archive  
in 2023 with funding from  
University of Toronto

<https://archive.org/details/31761116521808>



APPEARANCES: (Cont'd)

MR. J. W. ERICKSON)	RED LAKE-EAR FALLS JOINT
MR. B. BABCOCK )	MUNICIPAL COMMITTEE
MR. D. SCOTT )	NORTHWESTERN ONTARIO
MR. J.S. TAYLOR)	ASSOCIATED CHAMBERS OF COMMERCE
MR. J.W. HARBELL)	GREAT LAKES FOREST
MR. S.M. MAKUCH )	PRODUCTS
MR. J. EBBS	ONTARIO PROFESSIONAL FORESTERS ASSOCIATION
MR. D. KING	VENTURE TOURISM ASSOCIATION OF ONTARIO
MR. D. COLBORNE	GRAND COUNCIL TREATY #3
MR. R. REILLY	ONTARIO METIS & ABORIGINAL ASSOCIATION
MR. H. GRAHAM	CANADIAN INSTITUTE OF FORESTRY (CENTRAL ONTARIO SECTION)
MR. G.J. KINLIN	DEPARTMENT OF JUSTICE
MR. S.J. STEPINAC	MINISTRY OF NORTHERN DEVELOPMENT & MINES
MR. M. COATES	ONTARIO FORESTRY ASSOCIATION
MR. P. ODORIZZI	BEARDMORE-LAKE NIPIGON WATCHDOG SOCIETY
MR. R.L. AXFORD	CANADIAN ASSOCIATION OF SINGLE INDUSTRY TOWNS
MR. M.O. EDWARDS	FORT FRANCES CHAMBER OF COMMERCE
MR. P.D. McCUTCHEON	GEORGE NIXON







APPEARANCES: (Cont'd)

MR. C. BRUNETTA

NORTHWESTERN ONTARIO  
TOURISM ASSOCIATION





I N D E X   O F   P R O C E E D I N G S

<u>Witness:</u>	<u>Page No.</u>
<u>KENNETH A. ARMSON</u> , Resumed	2769
Continued Cross-Examination by Mr. Castrilli	2769
Cross-Examination by Ms. Seaborn	2950





I N D E X   O F   E X H I B I T S

<u>Exhibit No.</u>	<u>Description</u>	<u>Page No.</u>
55	Photographs substituting slides previously exhibited as Exhibit No. 55	2769
70	The Forest Resources of Ontario, 1963, which is a Department of Lands and Forests Publication.	2783
71	Excerpt from a document entitled: Great Britain's Woodyard, British America and the Timber Trade, 1763-1867, consisting of pages 249 and 250.	2790
72	Hard copy of overhead chart reflecting revenues generated to the province as a result of activities by various timber companies.	2811
73	Document entitled: A Forest Policy for Ontario, Report of the Ontario Economic Council dated February, 1970.	2821
74	Two hand-drawn sketches prepared by Mr. Armson.	2867
75	OFIA Brief dated March, 1977.	2919





1 ---Upon commencing at 9:35 a.m.

2 THE CHAIRMAN: Good morning, ladies and  
3 gentlemen. Please be seated.

4 Ladies and gentlemen, with respect to the  
5 schedule that we handed out yesterday, or advised you  
6 of yesterday, June the 28th I have to be back in  
7 Toronto for that evening and we are going to adjourn  
8 early that day, and we will probably have to start the  
9 following day not at one o'clock - I think I can get  
10 back here at 10:15 or so - so I am suggesting that we  
11 start at eleven o'clock the following morning on the  
12 29th.

13 Normally we would adjourn at 3:30, or as  
14 late as possible so that I could make a 4:45 flight out  
15 of here, but we have also had a request from the hotel  
16 that day that they have some major function for which  
17 they would like to use this room and have requested  
18 that we adjourn that day at two o'clock.

19 So I think in view of the fact that we  
20 would normally be adjourning only one and a half hours  
21 later, that we will accommodate them in that respect.

22 So what I am suggesting is, is that on  
23 the Tuesday we would probably start a bit earlier in  
24 the morning, maybe 8:30, and then adjourn at 2:00,  
25 start the next morning, which is the Wednesday, at

1 eleven o'clock in the morning and then perhaps sit  
2 slightly later. And all in all, we should essentially  
3 make up the hearing time that we are missing.

4 Now, I hope throughout the course of this  
5 hearing not to have to ask for these kind of  
6 accommodations, but it is impossible from time to time  
7 because I do have some other matters that I have to  
8 take care of in Toronto occasionally that will  
9 necessitate me going back for an evening or so in the  
10 middle of one of the weeks that we are here, and I am  
11 very reluctant to adjourn the hearing for a complete  
12 day.

13 I would rather try and work around it by  
14 starting a bit earlier the day I have to go back, and  
15 sitting a bit later the day I return so that we can  
16 keep this hearing moving along in an expeditious  
17 fashion.

18 And, of course, we will be discussing this  
19 Friday the question of the site visits, so the whole  
20 hearing schedule for the week of July 18th will be set  
21 supposedly at that time.

22 Are there any other preliminary matters to  
23 deal with before we recommence with Mr. Castrilli's  
24 cross-examination?

25 Mr. Freidin?



1 MR. FREIDIN: I would like to give you  
2 the photographs which will replace Exhibit 55.

3 THE CHAIRMAN: Very well.

4 MR. FREIDIN: Perhaps Mr. Mander can  
5 arrange for us to get the slide which was marked as  
6 Exhibit 55 returned.

7 ---EXHIBIT NO. 55: Photographs substituting slides  
8 previously exhibited as  
9 Exhibit No. 55.

10 MR. FREIDIN: The other matter, Mr.  
11 Chairman, Mr. Armson made a search of his files to  
12 determine whether he had a summary of information made  
13 available to him from foresters following that meeting  
14 with Dr. Baskerville the day after the report was  
15 released, and he has advised me that he is not able to  
16 find any such summary.

17 THE CHAIRMAN: I don't know, Mr.  
18 Castrilli might wish to address that matter further,  
19 but that certainly was the information that we  
20 requested from you at that time.

21 Mr. Castrilli?

22 KENNETH A. ARMSON, Resumed

23  
24 CONTINUED CROSS-EXAMINATION BY MR. CASTRILLI:

25 Q. Good morning, Mr. Armson.

1 A. Good morning.

2 Q. As you may recall in response to a  
3 question that was asked of you last week by Mr.  
4 Cosman - for the record it is at Volume XIII, page  
5 250 -- excuse me, 2359, lines 11 through 22.

6 I believe you testified that industry has  
7 met or exceeded objectives and targets and that this  
8 was particularly true with respect to regeneration.

9 Do you recall that question and giving  
10 that answer?

11 A. Yes, I do.

12 Q. Did you mean that regeneration  
13 success of the same species when you gave that answer?

14 A. No, it was the regeneration  
15 treatments as documented in the five-year reviews.

16 Q. And that was the sole source for your  
17 response?

18 A. Apart from certain personal  
19 observations, but the documentation is based on those  
20 five-year reviews.

21 Q. Thank you. Paragraph 13 of your  
22 testimony, which is at page 25 of Exhibit 53, you refer  
23 there to your --

24 THE CHAIRMAN: We are getting some  
25 interference once again from this sound system of ours.

1 Just a moment, Mr. Castrilli.

2 Excuse me a minute.

3 ---Discussion off the record

4 THE CHAIRMAN: Okay. I think we will try  
5 and recommence.

6 MR. CASTRILLI: Q. Paragraph 13, page  
7 25.

8 A. Yes, I have that.

9 Q. You refer there, Mr. Armson, to  
10 knowledge of the natural regenerative processes of jack  
11 pine and spruce that are dependent on conditions  
12 produced by large wild fires and that these are  
13 important in planning timber management activities.

14 I am just wondering, how are the natural  
15 regenerative processes of jack pine and spruce used by  
16 the MNR in planning such timber management operations?

17 A. Well, as an example with jack pine,  
18 and I believe I referred to this earlier, the  
19 conditions under which the cones open and the seeds are  
20 held in behind the cone scales are such that it  
21 requires relatively high temperatures to break the seal  
22 which is made up of resin, and the natural heat from  
23 the fire performs a function in breaking the seal.

24 If you wish to use or make use of cones  
25 on tree tops by getting the cones onto the ground, then



1       you have to have them in a condition in which the  
2       temperature will become high enough that those seals  
3       will break.

4                       Now, one of the ways in which this can be  
5       done, and this is on certain kinds of sites, if the  
6       jack pine is felled, particularly in the winter when  
7       the tops are frozen so that the branches with the cones  
8       are dispersed rather uniformly, if the site preparation  
9       involves exposing the mineral soil, normally this would  
10      be in a condition of either some exposed rock or more  
11      particularly with site preparation, exposed mineral  
12      soil using sand, in the heat of the summer the sand  
13      becomes very hot, therefore, cones that are resting on  
14      it, the seals will break, not totally, but enough of  
15      them will break and seeds will fall out and drop out  
16      and many of them will germinate.

17                      So that is one of the ways in which that  
18      knowledge of the response of the jack pine and the  
19      cones to a heat factor can be utilized and is indeed  
20      utilized on certain sites in certain locations.

21                      Q.   You say that knowledge of that  
22      process which appears to rely on artificial  
23      regeneration techniques is appropriate and compatible  
24      with large natural wild fires?

25                      A.   No.   What I am saying is that

1 knowledge of the effect of wild fire on the biological  
2 processes, if you will, of the species - if you know  
3 that, then you utilize that in the way in which you  
4 develop, in this case, a particular procedure or  
5 practice for regenerating a kind of jack pine stand in  
6 a certain condition with certain kinds of site  
7 preparation.

8 Q. In response to a question by Mr.  
9 Cosman, this is again at Volume XIII, page 2352 to  
10 2355, you stated that clear-cutting duplicates certain  
11 of the effects we also see caused by wild fires.

12 Do you recall that question?

13 A. Yes.

14 Q. Do you recall that answer?

15 A. Yes, I do.

16 Q. And I believe you said that the  
17 difference between clear-cutting and fires mainly  
18 relate to degree, nature, and rate of revegetation?

19 A. Rate of revegetation and processes.  
20 I believe I indicated there were certain processes  
21 there and one I spoke of was nutrient availability.

22 Q. Do you agree with me that with fire  
23 there is a complete removal of all organic material in  
24 the creation of a seed bed?

25 A. No.

1 Q. No? Your testimony is that with a  
2 fire in standing timber, seed beds are not created?

3 A. The seed bed -- I am sorry, the  
4 organic matter is not entirely gone, there will be seed  
5 beds there, yes.

6 Q. Well, that was my question.

7 A. I am sorry then, I misinterpreted.  
8 The seed beds will be there, yes. Organic matter  
9 remains in some degree.

10 Q. So the answer to my previous question  
11 that you said no to is really yes?

12 MR. FREIDIN: That was not the answer.

13 MR. CASTRILLI: Well, he said two things.  
14 I just want to be certain.

15 THE CHAIRMAN: Let's get the question  
16 clearly. I thought your question, Mr. Castrilli, was:  
17 With fire is there a complete removal of organic  
18 material?

19 MR. FREIDIN: That was not his question.

20 MR. CASTRILLI: All right. Just so I  
21 know -- I am sorry, it really had two parts. Complete  
22 removal of organic material and the creation of a seed  
23 bed.

24 Q. I gather your answer is yes to the  
25 creation of a seed bed and no to organic material?



1 A. That is correct.

2 Q. Thank you.

3 THE CHAIRMAN: Thank you.

4 MR. CASTRILLI: Q. Would you confirm for  
5 me, Mr. Armson, that when you large area clear-cut you  
6 are left with very little seed bed?

7 A. It depends on what kind of species  
8 and seed bed, you may or you may not.

9 Q. So it is possible, if you have  
10 removed all the trees including the cones and the  
11 seeds, there would be very little seed source left; is  
12 that correct?

13 A. That may be the case. There may be  
14 very little seed source and that may be part of the  
15 objective in managing that particular area.

16 Q. Would you also -- let me restate the  
17 question this way: Would you confirm for me that when  
18 you have a fire in standing timber, cones open up with  
19 the heat and release seeds that eventually result in  
20 your new stand of timber?

21 A. For certain species, yes.

22 Q. Which species would that be?

23 A. Well, the two species I've referred  
24 to have been jack pine and black spruce.

25 Q. Would that be true for both of them?

1 A. After fire?

2 Q. Yes.

3 A. Yes.

4 Q. Would you also agree with me that  
5 evapotranspiration processes are different from  
6 clear-cutting as opposed to fire?

7 A. Not necessarily. The revegetation is  
8 the key factor in terms of evapotranspiration and they,  
9 usually after clear-cutting, is residual vegetation to  
10 a higher degree than with a fire in the short term.  
11 There is, of course, lush revegetation after some  
12 period following a fire.

13 So there is a difference in the amount.  
14 In a clear-cut, normally there is a reduction in the  
15 evapotranspiration, but it is less than immediately  
16 following a fire.

17 Q. Just for the record, perhaps can you  
18 confirm for me that evapotranspiration essentially  
19 means the movement of water from ground to trees to  
20 foliage and into the atmosphere?

21 A. Well, it is the movement of water  
22 from the ground out to the atmosphere, either via  
23 foliage of whatever vegetation is there, or as an  
24 evaporation from exposed mineral soil surface.

25 Q. Thank you. Just to clarify this last

1 point. Your testimony is: Evapotranspiration can be  
2 impeded with clear-cutting because most of the trees  
3 are gone?

4 A. I didn't say it was impeded, I said  
5 it was altered.

6 Q. Slowed?

7 A. The amount of evapotranspiration  
8 would normally be reduced from clear-cutting.

9 Q. So that in a clear-cut area, would it  
10 be fair to say you may have a large water surplus in a  
11 low lying area?

12 A. Could we distinguish between low  
13 lying and other areas. There are distinctions here.

14 If you reduce the amount of  
15 evapotranspiration, from any area for whatever reason,  
16 the normal hydrological cycle is such that there are  
17 increases in internal water ground flow to whatever is\*  
18 in the drainage system and that is a general  
19 quantifiable effect of reduction of evapotranspiration  
20 from any source in watersheds.

21 Q. So that I understand your testimony  
22 on this: There will be a different water budgeting  
23 result depending upon whether the removal of trees from  
24 an area is caused by fire as opposed to clear-cutting;  
25 is that correct?



1                   A. It could well be. Much will depend  
2                   on the time of the event. If the clear-cutting or the  
3                   fire takes place at one part of the season, you will  
4                   have different effects.

5                   For example, with an early spring fire,  
6                   such as we may have in much of the the boreal forest,  
7                   the revegetation is extremely rapid following the fire  
8                   and there is probably a very short change -- there is  
9                   an overall reduction, but the surface vegetation comes  
10                  back and evapotranspiration probably would approximate  
11                  very closely what you would have in a clear-cut with  
12                  residual vegetation.

13                  Q. Would you also agree with me that  
14                  with fire, the burning of needles on the forest floor  
15                  enriches the floor with nutrients?

16                  A. Yes, it does.

17                  Q. And I believe you have already  
18                  testified that revegetation is rapid in a fire,  
19                  subsequent to a fire?

20                  A. Well, at some times of the year,  
21                  particularly in the summer fire, yes.

22                  Q. Would you agree with me that with a  
23                  clear-cut there is no additional enrichment of the  
24                  forest floor by nitrogen, there is just decomposition,  
25                  and if it is dry decomposition, then any revegetation

1 is slowed accordingly?

2 A. Well, there are three questions  
3 there, Mr. Chairman. If I take the first one -- would  
4 you repeat the first one?

5 Q. Sure, let me do that. Would you  
6 agree that with a clear-cut there is no additional  
7 enrichment of the forest floor by nitrogen?

8 A. The form of nitrogen changes, and as  
9 a result of decomposition becomes more -- there is more  
10 available to the existing vegetation. So in that  
11 sense, there is an enrichment; it goes from a bound  
12 form via decomposition to a relatively available form.

13 Q. But the form is by way of  
14 decomposition?

15 A. Yes.

16 Q. And if it is dry in the particular  
17 area, decomposition and any revegetation is slowed  
18 accordingly?

19 A. Yes, but the condition for dryness  
20 may or may not be there.

21 Q. Well, I am saying: In context of a  
22 dry situation, the revegetation would be slowed; would  
23 it not?

24 A. Normally it would be slow.

25 Q. Would you also confirm for me that

1 with clear-cutting there is the use of heavy mechanized  
2 vehicles which can both compact and disturb soil and  
3 result in impeded revegetation -- or regeneration?

4 A. Examples of compaction, to my  
5 knowledge, are very rare in this part of the -- these  
6 forest conditions, particularly when operations are  
7 carried out in the winter season or on soils that are  
8 well drained.

9 I am unaware of any studies that  
10 particularly document that, in our conditions as a  
11 major factor; that is, the compaction, and its effect  
12 on regrowth and vegetation of any significance.

13 Q. I am sorry. And with respect to soil  
14 disturbance from heavy mechanized vehicles?

15 A. Soil disturbance may often occur, in  
16 fact it may be one of the effects that the forester  
17 during in his prescription may want to happen as a  
18 result of using such machinery, or may not.

19 Now, we are getting down to what  
20 equipment, in what condition and for what purpose.

21 Q. Would you agree with me that with a  
22 fire in free-standing timber you will get rapid  
23 revegetation?

24 A. That is the normal sequence.

25 Q. With a clear-cut, humans must



1 intensely prepare the site in order to get comparable  
2 revegetation?

3 A. No.

4 Q. Your testimony is that if we  
5 clear-cut and did nothing, you would get the same  
6 result as a fire?

7 A. In many instances when you clear-cut,  
8 you get extremely rapid and lush vegetation and  
9 regrowth.

10 Q. Will you get the same species,  
11 the same species as what were there before? Yes?

12 A. Sometimes yes and sometimes no,  
13 depending on the species and the conditions.

14 Q. And with the fire situation, will you  
15 normally get the same species revegetated?

16 A. You may and you may not. In some  
17 instances you do not.

18 Q. Paragraphs 14 and 15 of your  
19 testimony.

20 A. Yes.

21 Q. Here you are also referring to the  
22 forest pattern. And would you agree with me that the  
23 pattern of a forest described in the Forest Resources  
24 of Ontario, 1986, deals primarily with age class  
25 distributions?

1 I am referring in particular to the two  
2 pages that are reproduced as Document 8 to your  
3 exhibit.

4 A. Those two illustrations are of age  
5 class distribution, yes.

6 Q. And would you agree with me that in  
7 contrast the Forest Resources of Ontario, 1963, deals  
8 primarily with volumes or area and volume?

9 A. Well, this Forest Resources also  
10 deals with volume.

11 MR. FREIDIN: Referring to the 1986...?

12 THE WITNESS: The 1986 one.

13 MR. CASTRILLI: Q. You are familiar with  
14 the Forest Resources of Ontario, 1963; are you not?

15 A. Yes. I don't have a copy with me.

16 Q. Would you confirm for me, Mr. Armson,  
17 that that would be a copy of the Forest Resources of  
18 Ontario, 1963?

19 A. Yes, it is.

20 MR. CASTRILLI: Mr. Chairman, I would  
21 like to make this the next exhibit.

22 THE CHAIRMAN: Exhibit No. 70.

23 Exhibit 70 will be the Forest Resources  
24 of Ontario, 1963, which is a Department of Lands and  
25 Forests publication.

1       ---EXHIBIT NO. 70: The Forest Resources of Ontario,  
2                               1963, which is a Department of  
                              Lands and Forests publication.

3                   MR. CASTRILLI: Q. Now, Mr. Armson, my  
4       question a moment ago was: The Forest Resources of  
5       Ontario, 1963, deals primarily with area and volume.

6                   Could you confirm that?

7                   A. It deals with area and volume,  
8       correct.

9                   Q. Would you agree with me that there is  
10      a need for more volume and product information in the  
11      forest resources inventory of 1986?

12                  A. No.

13                  Q. Wasn't that the burden of Dean  
14      Baskerville's comments?

15                  A. No.

16                  Q. Do you have Exhibit 16 before you?  
17      We will begin with page 13. The last full paragraph on  
18      that page in the first sentence:

19                  "The link between area of harvest..."

20                  Do you have that?

21                  A. Yes, I have that. Yes, I have that.

22                  Q. "The link between area of harvest and  
23      volume recovered by harvesting, that area  
24      is crucial to the successful design and  
25      implementation of forest management."



1                   Then if we go down to the next paragraph,  
2           the last line on page 13:

3                   "The Ontario Ministry of Natural  
4           Resources: this link between area of  
5           harvest and volume of harvest needs  
6           substantial improvement."

7           A.   Yes, I see that.

8           Q.   Do you disagree with Dean  
9   Baskerville's assessment?

10           A.   I don't disagree with those  
11   statements. They don't mention the forest resource  
12   inventory as such.

13           Q.   Could I also refer you to page 47 of  
14   Exhibit 16. Page 47.

15           A.   Yes.

16           Q.   The last paragraph on that page  
17   begins with the word "Without..."

18           A.   Yes, I see that.

19           Q.   It says there:

20                   "Without a realistic measure of volume  
21           availability, it is not possible to  
22           address the issue of relative area of  
23           volume in different forms."

24           Isn't Dean Baskerville there referring to  
25   the adequacy or inadequacy of the forest resources

1 inventory of 1986?

2 A. No, I do not believe -- he is not.  
3 He doesn't mention it and it is under a section that  
4 deals with plans and the objectives of plans and  
5 attainment of plan objectives.

6 Q. So your testimony is that, as far as  
7 you can tell, he is not referring to -- I believe it is  
8 Exhibit 56, the FRI, 1986?

9 A. I would suggest that in the other  
10 sections of the report where he specifically deals with  
11 the FRI, it is rather clear that in those sections that  
12 you have referred to, and to which I have answered,  
13 that he is not referring specifically to the FRI.

14 Q. I see. And didn't the Woodbridge  
15 Reed Report of 1987 refer to the need for greater  
16 volume information as well?

17 A. I believe it did, yes.

18 Q. And you are probably familiar with  
19 the report?

20 A. Yes, I have it here.

21 Q. It is Exhibit 61. I refer you to  
22 page 21, the top paragraph on that page.

23 A. Yes, I have that.

24 Q. And the report indicates:

25 "Still a great deal of uncertainty

1 surrounds the wood supply issue. The  
2 accelerated depletion built into the MAD  
3 on most management units provides a  
4 temporary harvest potential. The impact  
5 of this acceleration on long-term supply  
6 and hence the opportunity for industrial  
7 development is not well presented, also  
8 MAD is an expression of area rather than  
9 volume of wood, while area control is a  
10 logical means of forest management,  
11 volume of wood is eventually needed to  
12 assess new opportunity."

13 Do you agree with that assessment?

14 A. In general, yes.

15 Q. If forest resource inventory of 1986  
16 was providing such information, why would Woodbridge  
17 Reed and why would Baskerville make such comments?

18 A. Because the calculation, for example,  
19 as referred to in page 21 of the Woodbridge Reed  
20 Report, the maximum allowable depletion is determined  
21 at the unit level, not the provincial level. In  
22 addition to information and data from the forest  
23 resources inventory, there is other information that is  
24 normally used or should be used at the unit level.

25 Q. So FRO '86 is inadequate at the



1 management unit level; is that your testimony?

2 A. It was not designed to be used as a  
3 sole piece of information for management planning at  
4 the unit level unit.

5 Q. So by itself it is not adequate for  
6 that purpose; is that correct?

7 A. By itself it is not the totality,  
8 that's right.

9 Q. Thank you. Mr. Armson, on the next  
10 point, which is your paragraph 15, I would just like -  
11 and I recognize that this will be dealt with, I believe  
12 it is Panel 3 - but I am just wondering if you can just  
13 advise me at this time what the concept sustained yield  
14 management means to you, or if you could define it for  
15 me?

16 A. Well, the definition, as we have in  
17 this province, is the one that is given in the Crown  
18 Timber Act and that is where the sustained yield is  
19 where you, in fact, are able to harvest or there is a  
20 depletion related to the approximate growth that the  
21 area can provide.

22 Q. Thank you. Paragraph 16 -- I should  
23 be indicating for the record that this is still Exhibit  
24 53. It is at page 26. And there you are referring to  
25 forest imbalance and older and younger forests.

1                   Would the imbalance of older age classes  
2                   not include the condition that the older age classes  
3                   must be stretched out over a period of time until  
4                   sufficiently younger growth is available to sustain the  
5                   yield?

6                   A. One of the strategies could be that,  
7                   but it would depend on the nature of the matured,  
8                   over-mature forest and the conditions under which it  
9                   was growing. Some forests cannot be "stretched out".

10                  Q. And when you say some forests cannot  
11                  be stretched out, do you mean by a particular working  
12                  group, or do you mean a forest type like the boreal, or  
13                  do you mean just jack pine, or black spruce?

14                  What do you mean by forests?

15                  A. No, I am referring to the kinds of  
16                  growing conditions - and, if I might for the Board, I  
17                  believe I referred to this in my original evidence -  
18                  that if certain forests, and I use an example, we have  
19                  documentation on black spruce forest, where it is  
20                  growing on a fertile or very productive site, then it  
21                  matures rapidly at an earlier age and it reaches its  
22                  over-maturity and its decadence is a very rapid one  
23                  too.

24                  So you cannot store - if you want to use  
25                  that wood - or stretch out older forests usually on the

1 most productive soils. On the less productive, less  
2 fertile soils, it is much more of a reasonable strategy  
3 to employ and there is documentation on this.

4 Q. Is there a standard text you rely on  
5 for that comment?

6 A. Not a standard text. We have  
7 documentation and some of that documentation is in the  
8 Baskerville Report. He used some of the information  
9 that we had on black spruce.

10 Q. I would like to refer you to page 109  
11 of your testimony and this is, as you recognize, a part  
12 of your 1976 report. And in the first paragraph, the  
13 last sentence, you state:

14 "Only incidentally did any portion of the  
15 capital remain in the forest itself."

16 And you then quote Lower as follows -  
17 perhaps I will just read it into record, it is a short  
18 sentence:

19 "A staple trade such as the timber trade  
20 is essentially an exploitive trade and in  
21 it the dice are loaded in favour of the  
22 metropolis."

23 Mr. Armson, can you confirm for me that  
24 Lower's reference to the metropolis is in fact to  
25 outside of Ontario and outside of Canada?



1                   A. It was partly that. I wouldn't say  
2 he was referring -- my interpretation of his words  
3 would be that he included the more settled portions of  
4 Canada.

5                   Q. Mr. Armson, I am showing you a copy  
6 of Mr. E.A. Lower's text and, in particular, the page  
7 that includes where your quote comes from.

8                   Do you recognize that page?

9                   A. Yes, I do.

10                  MR. CASTRILLI: Mr. Chairman, I would  
11 like to make that the next exhibit.

12                  THE CHAIRMAN: Exhibit 71. This is an  
13 excerpt from a document entitled: Great Britain's  
14 Woodyard, British America and the Timber Trade  
15 1763-1867, and the excerpt consists of pages 249 and  
16 250.

17  
18       ---EXHIBIT NO. 71: Excerpt from a document entitled:  
19 Great Britain's Woodyard, British  
20 America and the Timber Trade,  
1763-1867, consisting of pages 249  
and 250.

21                  MR. CASTRILLI: Q. Mr. Armson, looking  
22 at that page 250, the portion of the first paragraph on  
23 that page that begins five lines down from the bottom  
24 of the first paragraph: "Much of the profits..."

25                  Have you found that?

1 A. Five lines down?

2 Q. Perhaps I can show you.

3 A. 250. Sorry, over the page.

4 Q. Beginning there. (indicating)

5 A. Yes, okay.

6 Q. Mr. Lower -- or Dr. Lower says there:

7 "Much of the profits from the Canadian  
8 lumber industry, perhaps most of them,  
9 passed into American hands. Cornell  
10 University was founded, it is said, on  
11 the wealth extracted from the pine  
12 forests around Bel Ewart on the shores of  
13 Lake Simcoe. In that case, the  
14 Americans got the university and the  
15 Canadians were left with the stumps."  
16 It goes on to say:  
17 "The Canadian forests contributed to the  
18 prosperity of the British timber importer  
19 and the enrichment of the American  
20 lumbermen. Canadians got some crumbs  
21 from their own rich table. Today they  
22 still get a humble share of the earnings  
23 of foreign capital within their country  
24 by the devices of taxation (corporation,  
25 income taxes, and taxes on transfers of

1 dividends) and now that Americans own  
2 most of Canada's industry that is  
3 probably the only way in which they can  
4 get a share. In the 19th Century,  
5 devices of taxation did not exist and it  
6 must be concluded that the new colonies  
7 got the minimum out of the wreck of their  
8 forests."

9 Then comes the sentence that you quoted,  
10 Mr. Armson.

11 Would you agree with me that those two  
12 passages I have just read into the record, Dr. Lower is  
13 referring to the metropolis as being outside of Ontario  
14 and outside of Canada?

15 A. I would state that the opinions that  
16 Professor Lower has expressed here concerning profits  
17 are only one side of the wealth and they only reflect  
18 one part of the metropolis.

19 There are no documentation in here, apart  
20 from statements. I believe, however, that there were  
21 considerable profits that moved to outside of the  
22 country and outside of the province, but we do have  
23 documentation of how much indirect revenues, from the  
24 timber trade, went to the Consolidated Revenue Funds of  
25 this province for this same period, and it was a very

1 considerable amount.

2 So, in that sense, there was a very  
3 significant amount moving to the metropolis of what we  
4 might call this province. He also referred, if I  
5 might, to the statement that a number of the lumber  
6 kings -- this is in the same document you gave me in  
7 the proceeding page at the bottom. And, if I might:

8 "They enriched a considerable number of  
9 lumber kings, especially in the City of  
10 Ottawa."

11 Q. Just so we are clear on this: Your  
12 testimony, as it appears at page 109 of Exhibit 53, is  
13 that incidentally did any capital stay in the forests.  
14 And I am suggesting to you that Mr. Lower -- or Dr.  
15 Lower is stating that only incidentally did any stay in  
16 the country, and your testimony is you disagree with  
17 that?

18 A. I would disagree because there is  
19 ample documentation to demonstrate that close to half  
20 the revenues of this province, during the period of the  
21 early part of this century, came from direct revenues  
22 from timber and went to the Treasury in Toronto.

23 Q. Without wishing to burden you with a  
24 further undertaking, do you have a particular document  
25 in mind when you make that statement?



1           A. Yes. If I may, I could explain this.  
2       A published study by a Dr. Paul Pross documented it  
3       from --

4           THE CHAIRMAN: Sorry, what was his name?

5           THE WITNESS: Paul Pross, P-r-o-s-s,  
6       documented this from the period of 1867 to, I believe,  
7       1960 -- or 1967, I cannot be sure, but in that period.

8           I relied on his data which he had  
9       obtained from government records. I then updated that  
10      more recently from the -- I obtained figures from the  
11      Ministry of Treasury and Economics and also data --  
12      public data on the direct timber revenues and produced  
13      that in the form of a document, a graph -- tabular  
14      graph and I can provide that to the Board.

15          MR. CASTRILLI: Q. I would ask that you  
16      do make that available.

17          A. Yes, I will.

18          Q. I would appreciate that. Thank you.

19          Q. The Paul Pross, was that a book; do  
20      you know the title offhand?

21          A. It was originally a Ph.D. thesis. It  
22      was -- I don't believe it was published as a book and I  
23      believe I obtained it in its thesis form.

24          There have been elements that have  
25      appeared in certain journals, but I can give you the

1 full citation for that document and refer you to the  
2 pages in that document, if you so wish.

3 Q. I would appreciate that, Mr. Armson.  
4 Thank you.

5 A. Yes.

6 Q. Paragraphs 27 and 28 of your  
7 testimony and page 29.

8 You are referring there generally to the  
9 early 1980s and the concern that existed at that time  
10 about sandy soil areas in southern Ontario which had  
11 been cleared in the early 19th Century and then  
12 abandoned as wastelands.

13 And you then talk about the development  
14 of artificial regeneration and you speak also of the  
15 silvilcultural development techniques as preliminary  
16 lessons for forest renewal.

17 Would you agree with me that the  
18 preliminary lessons for forest renewal seem to indicate  
19 that clear-cutting creates wasteland that must be  
20 regenerated expensively?

21 A. No.

22 Q. Would you agree with me that good  
23 reproduction occurred by chance rather than by  
24 management?

25 A. In the forested areas, yes.

1 Q. And that was Mr. Kennedy's conclusion  
2 as well; was it not?

3 A. I believe it was. I have...

4 Q. I refer you to Exhibit 62 which is  
5 excerpts from the Kennedy Commission Report.

6 A. Yes, I have that document.

7 Q. Page 56.

8 A. Page...?

9 Q. 56. The second sentence under the  
10 heading of reproduction.

11 "Good reproduction, when it has occurred,  
12 has always created satisfaction but it  
13 has been the child of chance rather than  
14 of design."

15 Would you agree with that assessment?

16 A. At that time, yes, that was correct.

17 Q. And the next paragraph on that page,  
18 the last sentence.

19 "Other cutover areas on the average are  
20 reproducing to inferior species or are  
21 barren or only partially stocked."

22 Would you agree with that assessment?

23 A. I think that is fairly accurate.

24 Q. And the third paragraph on that page  
25 under that heading of reproduction, I will just read it

1 into the record and then I will ask you a question as  
2 well, Kennedy's concluding here:

3 "If Ontario is to remain one of Canada's  
4 major timber producing provinces, this  
5 trend must be checked and practices  
6 developed and enforced which will  
7 guarantee a future crop preferably  
8 better than, but at least as good as the  
9 one harvested. If such is economically  
10 feasible, much research is needed in  
11 cutting the different species on  
12 different sites before such methods  
13 assuring adequate reproduction can be  
14 recommended with a reasonable degree of  
15 certainty and such research should not be  
16 delayed", according to Commissioner  
17 Kennedy."

18 Do you agree with that statement?

19 A. For that period in time, it was a  
20 reasonable statement.

21 Q. Mr. Armson, is it necessary to resort  
22 to more expensive artificial regeneration methods,  
23 based on the lessons of the waste agricultural lands of  
24 southern Ontario when Commissioner Kennedy indicated  
25 that cutting could be modified to regenerate the



1 forest.

2                   Isn't that the burden of the comments I  
3 just read into the record?

4                   A. There are many areas - in response to  
5 that, there are many areas and conditions whereas the  
6 Major General pointed out, he was concerned with  
7 guaranteeing a future crop preferrably better, or at  
8 least as good as the one there, but preferrably better  
9 in many instances; one then would carry out activities  
10 which would change either the species or the spacing  
11 or, as we are doing in a very small way, but probably  
12 to some degree greater extent, changing the genetic  
13 makeup or the ability of the species to grow on certain  
14 sites.

15                   And this would be done, therefore, with a  
16 form of regeneration other than utilizing the existing  
17 seed crop on the site.

18                   Q. Well, didn't Commissioner Fahlgren  
19 approximately 40 years later also call for modified  
20 clear-cutting in the exhibit I referred you to last  
21 time, Exhibit 59?

22                   A. Yes, he referred to it.

23                   Q. So 40 years apart Commissioners  
24 Kennedy and Fahlgren are saying essentially the same  
25 thing; would you not agree?

1 A. Yes, they are.

2 Q. Thank you. Just for a clarification  
3 point. At paragraph 9 of your Exhibit 53 you did  
4 argue, did you not, that the forests have demonstrated  
5 their natural resilience by regenerating?

6 A. Yes.

7 Q. So why then do you argue in paragraph  
8 28 of your evidence for the need for artificial  
9 regeneration based on the agricultural wasteland  
10 experience of southern Ontario?

11 A. Because in order to achieve the  
12 objectives of management we may wish to undertake  
13 certain practices which will change either the  
14 proportion or nature of the species, or the rate at  
15 which they grow, or the density at which they grow.  
16 There are a number of factors.

17 Q. Mr. Armson, doesn't it suggest to you  
18 that modified cutting operations are important,  
19 particularly if such operations can reduce the need for  
20 expensive artificial regeneration?

21 A. They are important, and we do carry  
22 them out.

23 Q. Which panel will be talking about  
24 modified cutting operations?

25 MR. FREIDIN: Ten.

1 MR. CASTRILLI: Panel 10. Thank you.

2 Q. And just to be clear, in response to  
3 my last question, do you agree that modified cutting  
4 operations can reduce the need for expensive artificial  
5 regeneration?

6 A. They may be appropriate to meet the  
7 objectives of management. I would also suggest that  
8 modified cutting operations are a generic term and  
9 cover a great deal and, in a professional sense, have  
10 very little specificity.

11 We refer to silvicultural systems and I  
12 believe these are referred to in the Environmental  
13 Assessment Document.

14 Q. Which defines the various cutting  
15 procedures; is that correct?

16 A. That's right, which includes  
17 clear-cutting as a silvilcultural system, selection  
18 system and so on.

19 Q. Paragraph 31, this is at page 30, you  
20 refer to the direct result of the market changes that  
21 you referred to in paragraph 30 as being an expansion  
22 of settlement in northern Ontario.

23 Can you advise the Board, Mr. Armson,  
24 what was the success of this expansion of settlement?

25 A. I would suggest that the evidence of

1       that success are the towns of Dryden, Kapuskasing,  
2       Smooth Rock Falls, Iroquois Falls, to name a small  
3       number.

4                   Q.   Would you agree with me that in fact  
5       thousands of farms in the clay belt and west of the  
6       Lakehead were abandoned?

7                   A.   I don't know the exact number but,  
8       yes, there is a considerable area in the clay belt that  
9       I am familiar with that was cleared for forest -- for  
10      agriculture and was abandoned or has revegetated, yes,  
11      consequently.

12                  Q.   Exhibit 62, page 168. That is the  
13      excerpts from the Kennedy Commission Report.

14                  Sorry, do you have it? I would like to  
15      show you the paragraph, paragraph 3.

16                  A.   Yes, I have that.

17                  Q.   The third sentence.

18                  A.   Yes.

19                  Q.   Mr. Commissioner Kennedy indicates:

20                  "Thousands of abandoned or  
21                  semi-abandoned farms in the clay belt or  
22                  west of the Lakehead bear testimony to  
23                  the fact that more than a capacity to  
24                  produce farm crops is necessary to  
25                  maintain settlers on land after it has



1                   been denuded of timber."

2                   And I presume you are aware that  
3       Commission Kennedy in fact recommended concentrating  
4       settlers on better land according to a forest land  
5       classification which he proposed after an area had been  
6       denuded by timber; do you recall that?

7                   A. I do recall that, yes.

8                   Q. And that is in fact referred to at  
9       paragraph 3 of page 168 of Exhibit 63.

10                  In paragraph 35 of your evidence, you  
11       refer there to the 1929 Pulpwood Conservation Act which  
12       you indicate introduced the concept of sustained yield,  
13       and I understand that this statute required all pulp  
14       companies with licenseholdings on public lands to manage  
15       the Crown forests on a sustained yield basis; is that  
16       correct?

17                  A. I believe that was the intent, yes.

18                  Q. Now, I understand from your testimony  
19       on, I believe, June 8th that the Pulpwood Conservation  
20       Act was -- the term you used was "not implemented", and  
21       I ask you to accept that subject to verification.

22                  By that use of terminology, can I presume  
23       that you meant that very little was done by the  
24       government to ensure that industry, in fact, complied  
25       with the Act?

1 A. That is correct.

2 Q. So would you agree with me, Mr.  
3 Armson, that there was neither compliance nor  
4 enforcement under this Act in the 20-year period,  
5 roughly covering 1930 to 1949?

6 A. To my knowledge, that is correct.  
7 I am also not sure whether the Act was still in force  
8 during that entire period, but I wouldn't know that.

9 Q. I will refer you to Exhibit 4, which  
10 is the Environmental Assessment Document. Page 3 of  
11 the main part of that text, lines 10 to 13.

12 Do you have that page?

13 A. I believe so.

14 Q. Let's just confirm it.

15 A. Is that the page you are referring  
16 to?

17 Q. Yes, that one. (indicating)

18 A. Okay.

19 Q. You will note there in that  
20 paragraph, the authors of this document -- perhaps I  
21 should ask you: Were you the author of this part of  
22 this document?

23 A. No, I did not write this. They have  
24 drawn upon some other writings of mine, but I didn't  
25 write it.

1 Q. Okay. You will note there in the  
2 last sentence, it indicates:

3 "In general, the period 1930 to 1949 was  
4 one of exploitation of timber resources  
5 with very little done to ensure that  
6 industry in fact complied with the  
7 Pulpwood Conservation Act."

8 So the authors of Exhibit 4 appear to be  
9 of the opinion that the Act was in force for that  
10 20-year period; would you agree?

11 A. Apparently so, yes.

12 Q. Paragraph 38 of your evidence, at  
13 page 31, you refer there to the Kennedy Commission,  
14 1947, and you note that it focused attention on the  
15 need for forest management in the context of sustained  
16 yield, and also you indicate the Commission addressed  
17 the issue of forest utilization.

18 Could you clarify for the Board what you  
19 mean by forest utilization?

20 A. The Commissioner was very much  
21 concerned about what he thought was improper  
22 utilization of timber, Crown timber, in that - and  
23 there are pictures and numbers I believe in his  
24 report - that, for example, show large logs that he  
25 would consider would traditionally be much more

1       suitable to go into a saw mill, going into wood rooms  
2       of pulp mills and smaller timber and he was concerned  
3       about that kind of utilization of saw logs going to saw  
4       mills rather than going to pulp mills.

5                       And also wasteful practices was another  
6       area, that is an aspect of utilization.

7                       Q.   Would you agree with me that  
8       Commissioner Kennedy also noted other uses of the  
9       forest, besides logging in his report?

10                      A.   Yes, he did.

11                     Q.   Would you agree with me that his  
12       terms of reference were to investigate, inquire into,  
13       and report upon the forest resources of Ontario and  
14       their conservation, management, development and  
15       beneficial utilization for all purposes?

16                     A.   Yes, I believe, and I have those  
17       terms of reference in front of me.

18                     Q.   That's for the record from Exhibit  
19       62.

20                     Would you agree that Commissioner Kennedy  
21       as well noted the need for development of data for fish  
22       and wildlife and tourist enterprises?

23                     A.   Yes, he did.   At least I believe  
24       that's correct.

25                     Q.   That would be subject to verification



1 at page 171, the last paragraph of Exhibit 62.

2 You might say yes for the record.

3 A. Yes, I see that and I am aware of  
4 that.

5 Q. The reporter can't -- well, she can  
6 but it's easier for you to say yes than for her to  
7 indicate a nod.

8 And, Mr. Armson, would you also agree  
9 that Commissioner Kennedy was concerned with  
10 perpetuation and improvement of the forests together  
11 with the secondary benefits of tourist attractions,  
12 recreation, control of stream flow, maintenance of  
13 water levels, increase in fish and wildlife?

14 A. Yes, he was concerned with all  
15 aspects, I agree.

16 Q. And that's reflected at page 192,  
17 paragraph 3 of Exhibit 62?

18 A. Yes, I agree. I am sorry, I thought  
19 I had said that.

20 Q. Thank you. Now, in paragraph 39 of  
21 your evidence you refer to the Forest Management Act in  
22 which you indicate -- reiterated the responsibility of  
23 large timber companies to regenerate areas harvested.

24 Now, when you say that companies were  
25 made responsible for the regeneration of areas

1 harvested, do I take it that that responsibility is the  
2 same one that remained with the companies until 1962?

3 A. That would be the -- yes, the  
4 Minister could require that to be done. It was in the  
5 Crown Timber Act. If my memory searches me correctly,  
6 the Minister may; it was not mandatory.

7 Q. Okay. And this is the same  
8 responsibility that was removed when the Ministry of  
9 Natural Resources took over from the companies the  
10 responsibility for regeneration efforts between 1962  
11 and 1969?

12 A. Yes.

13 Q. And it is the same responsibility  
14 that was returned to the companies by the 1979  
15 amendments to the Crown Timber Act; is that correct?

16 A. Not quite the same because the  
17 responsibilities in the Crown Timber Act amendment,  
18 Section 6 of 1979 were much more - I won't say  
19 elaborate - but they required obligations, not only to  
20 carry out work, but to prepare plans and to have them  
21 prepared in a certain format.

22 So much different type of context and set  
23 of requirements at that time.

24 Q. Would you agree with the general  
25 proposition that obligations that had been removed were

1 returned in 1979, in addition to the greater and newer  
2 responsibilities?

3 A. Yes.

4 Q. Thank you. Would you agree, Mr.  
5 Armson, that a principal difference between what took  
6 place under the 1947 Forest Management Act and what  
7 takes place now under the post-1979 amendments to the  
8 Crown Timber Act is that the Ministry of Natural  
9 Resources is paying companies to regenerate which was  
10 not in fact what they were doing in 1947?

11 A. That is not the principal different.

12 Q. I didn't say the principal  
13 difference, I said a principal difference.

14 A. It is a difference, but I would not  
15 use the word principal.

16 Q. What would you regard as the  
17 principal difference?

18 A. The principal difference is the one  
19 that I enunciated in my evidence that in 1979 there was  
20 a very considerable body of professional expertise that  
21 had been developed by Ministry foresters, particularly  
22 from the late 1950s on and I believe this, in my  
23 opinion, was one of the most significant if not the  
24 most significant, factor.

25 Q. What you describe as the

1 professionalization of the area -- well, sorry, the  
2 professionalization of the forest core, if I can put it  
3 this way?

4 A. I will suggest that was one of the if  
5 not the main factor.

6 Q. Thank you.

7 MR. CASTRILLI: Mr. Chairman, I am about  
8 to embark on a new major area of cross-examination.  
9 Would this be an appropriate place to break.

10 THE CHAIRMAN: Very well.

11 The Board will rise for 20 minutes.

12 Thank you.

13 ---Recess at 10:55 a.m.

14 ---Upon resuming at 11:30 a.m.

15 THE CHAIRMAN: Thank you, ladies and  
16 gentlemen. You have a preliminary?

17 MR. FREIDIN: Yes.

18 Mr. Jeffery, I would just like to provide  
19 the Board - and I guess Mr. Castrilli - with one of the  
20 documents that the witness referred to before the break  
21 in terms of revenues generated by the -- generated for  
22 the province as a result of activities of various  
23 timber companies.

24 Perhaps I could...

25 THE CHAIRMAN: Do you want that



1 exhibited, Mr. Castrilli?

2 MR. CASTRILLI: I would like to know what  
3 the source of it is. It doesn't indicate what the  
4 source of it is.

5 THE WITNESS: If I might explain that and  
6 how the data were derived. If I might do that, Mr.  
7 Chairman, for...

8 THE CHAIRMAN: I think that would be  
9 appropriate. Go ahead.

10 THE WITNESS: I have an overhead, Mr.  
11 Chairman, that perhaps is more generally visible. I  
12 don't know whether the throat mike works. I don't know  
13 whether to risk that one.

14 THE CHAIRMAN: Why don't you just put it  
15 on the overhead and speak loudly if you have to, for  
16 the moment.

17 THE CHAIRMAN: Can everybody see that  
18 overhead?

19 (No response)

20 MR. FREIDIN: Maybe I should give the  
21 Board a copy.

22 THE CHAIRMAN: I think that in view of  
23 the fact that there is going to be an explanation of  
24 this document, we should admit it as an exhibit.

25 Mr. Castrilli, will ask the witness as to

1 its source and other details.

2 This will be Exhibit No. 72 I believe.

3 ---EXHIBIT NO. 72: Hard copy of overhead chart  
4 reflecting revenues generated to  
5 the province as a result of  
activities by various timber  
companies.

6 THE CHAIRMAN: Mr. Armson, can you  
7 indicate to the Board the source of this document?

8 THE WITNESS: Yes, the source is twofold.  
9 For the period from showing here, 1871 to 1961, the  
10 data are those in a document that I referred to earlier  
11 by Dr. Paul Pross and I don't have that specific  
12 reference, but I will provide the Board with that as  
13 soon as I can, I don't have the document with me.

14 For the data from that period to the  
15 five-year average I indicated in 1981, those are data  
16 that I obtained from the Ministry of Treasury and  
17 Economics as to the total budgetary revenues in the  
18 consolidated revenue fund and the timber revenues  
19 referred to are those that were published in the  
20 Statistics of the Ministry of Natural Resources.

21 THE CHAIRMAN: For that same period?

22 THE WITNESS: For that same period, yes.  
23 I can provide the Board when I return with a tabulated  
24 data and the copies of Dr. Pross' tables.

25 MRS. KOVEN: How are you defining timber?

1                   THE WITNESS: Yes. What the graph  
2 represents is the proportion that direct timber  
3 revenues are to total provincial budgetary revenues.

4                   Timber revenues here are what are termed  
5 direct and are the stumpage revenues plus what are  
6 currently now called area charges and, in previous  
7 years, these were broken out -- there were a forest  
8 protection charge. So in other words, the charges that  
9 directly came from licencees to the province in the  
10 form of either stumpage or some designated area charge  
11 and at one time that was broken into a forest  
12 protection charge.

13                  Those are the timber -- those are the  
14 components in the timber side.

15                  I discussed with an official in Revenue  
16 whether he used -- I didn't realize this at the time,  
17 there are two revenue figures; one is called a total  
18 fiscal revenue and the other is a total budgetary  
19 revenue, and I was advised I should use the budgetary  
20 revenue - and that is what this is based on - because  
21 they do not include payments that enter into the system  
22 but are really not direct revenues to the province.

23                  I am just trying to think of an example.  
24 They tend to inflate the number somewhat, but not a  
25 considerable amount. I was advised to use the

1 budgetary reference and that is what I did.

2 The histograms or the columns here,  
3 although I have data for each year - as I mentioned,  
4 Dr. Pross had gone back to the information from 1867  
5 on - it would have have made a very confusing chart and  
6 what I did was: I took each of the five-year periods -  
7 and they were indicated here on the lower access - and  
8 computed, as indicated there, the mean for each of  
9 those five-year periods.

10 Now, obviously there are year-to-year  
11 variations, so what you are looking at are the running  
12 five-year means through the piece.

13 Yes, Mr. Martel.

14 MR. MARTEL: Could I ask a question  
15 because I don't really understand. The types of  
16 revenue aren't taken into consideration -- you have  
17 made this graph--

18 THE WITNESS: Yes.

19 MR. MARTEL: --which is a percentage of  
20 revenues and how can it mean very much, because the  
21 amount of revenues that are coming in are so vastly  
22 escalated, how can you make a comparison between those  
23 two?

24 I am not I explained myself carefully.  
25 Budget, for example, in 1981 was in the neighborhood of



1       \$26- or \$27-billion I would suspect, but I don't know  
2       what the total revenues to the province was way back  
3       then.

4                   The amount here is rather insignificant  
5       of the total revenues and that's because there were  
6       other types of revenues. Here they look much more  
7       substantial and that's only because there weren't any  
8       other revenues being collected.

9                   And I am not sure why they mean anything.  
10       There wasn't even such an animal as income tax and so I  
11       don't know if this graph means anything.

12                   THE WITNESS: If I might explain, Mr.  
13       Martel, what it meant to me.

14                   MR. MARTEL: Okay.

15                   THE WITNESS: It meant that for the  
16       latter part of the 19th century and up until, let's say  
17       the First World War, just beyond 1901, up in there,  
18       more than 20 per cent, with one exception there, of the  
19       total direct revenues to this province came in fact  
20       from at that time the exploitation, if you like, of the  
21       forests of this province. So it was a very substantial  
22       amount in terms of the province.

23                   I quite understand your point, that there  
24       just weren't other sources of revenue and really what  
25       the graph means is for that period of time the direct

1 revenues from the forest - I am returning now to  
2 Professor Lower's remark - were in fact a substantial  
3 component of the revenues that the province had to  
4 expend on such things as roads, schools and so on  
5 within the province.

6 And that would be mainly in the southern  
7 part of the province.

8 MR. MARTEL: But the only point I am  
9 trying to make: That sort of comparison is like  
10 comparing apples and oranges because it isn't a true  
11 reflection of what in fact -- while it reflects the  
12 amount of money that's coming in, it doesn't reflect a  
13 true comparison because of all the other types of  
14 revenue that are coming in.

15 THE WITNESS: That is correct and it  
16 isn't meant to. It is proportion, it is a ratio.

17 MR. MARTEL: I understand that, but it  
18 looks like a comparison of apples and originals.

19 THE WITNESS: Well, it is not really a  
20 comparison, it is just to reflect Lower's statement  
21 that there was a capital and the capital here was, I am  
22 taking, as the direct revenues.

23 Other parts of the capital, as Mr.  
24 Castrilli has noted, went to other places.

25 THE CHAIRMAN: Mr. Castrilli, do you have

1 some questions on this?

2 MR. CASTRILLI: Yes, I did.

3 Q. Mr. Armson, if you know, can you  
4 advise the Board what was the total revenues to the  
5 province from all sources in 1871?

6 A. No, I can't. I would have to look at  
7 the data sheet. I don't have that with me.

8 Q. So the figure of 20 per cent might  
9 have been 20 per cent of a \$1-million?

10 A. Oh, in terms of the absolute amount,  
11 of course, these are -- and in terms of inflation, but  
12 for each period they are the same set of dollars, if  
13 you follow me. Of course, inflation and other things  
14 have happened, but these are ratios pertinent to that  
15 particular period.

16 Q. But, for example, in 1871 it might  
17 have been 20 per cent - just to take a number, since we  
18 don't know what the real number is - it might have been  
19 20 per cent of \$1-million where in 1981 it would be  
20 approximately one per cent of \$26-billion?

21 A. Oh, correct.

22 Q. Thank you. Mr. Armson, I understand  
23 that in 1953 a new Crown Timber Act was passed and  
24 under it forest product companies were made responsible  
25 for planting, harvesting and regeneration; is that

1 correct?

2 A. I believe so, yes.

3 Q. And would you agree with me that very  
4 little artificial regeneration of harvested areas was  
5 actually carried out in this time period, partly  
6 because of industry reluctance?

7 A. There was very little carried out.  
8 Two companies, specifically, undertook artificial  
9 regeneration at that time by installing their own  
10 nurseries and growing their own stock.

11 Q. This is reflected in your -- I should  
12 say, in the Ministry's --

13 MR. CASTRILLI: Mr. Chairman, is my voice  
14 coming out clearly, I am getting more feedback than I  
15 did before the break.

16 THE CHAIRMAN: It is coming out clearly  
17 as far as we are concerned. I might advise that the  
18 sound technician will be in during the lunch hour to  
19 have another go at the system.

20 MR. CASTRILLI: Okay. As long as  
21 everyone else can hear me, I will proceed.

22 Q. Page 4 of Exhibit 4, Mr. Armson.

23 A. Excuse me, is that the Timber  
24 Management Planning Manual or the EA?

25 Q. I am sorry, Exhibit 4 is the Class



1 EA. I notice you have a photo-reduced version of the  
2 Timber Management Planning Manual and I am envious.

3 A. Yes, I have page 4.

4 Q. Lines 15 and 16 indicate that there  
5 was very little -- there was little regeneration of  
6 harvested areas carried out partly because of industry  
7 reluctance. Do you agree with that statement?

8 A. Yes.

9 Q. Now, is it your testimony that  
10 companies did not engage in regeneration in this period  
11 because there was no major incentive for them to do so?

12 A. That was one of reasons.

13 Q. And I understand that was a position  
14 that was taken by the Ontario Professional Foresters  
15 Association in 1957. It is reflected in your paragraph  
16 44?

17 A. Yes, I believe.

18 Q. I am curious as to why the  
19 Association took that position. What better incentive  
20 could a company have to regeneration than to know that  
21 if it did not do so, it would not have any trees to do  
22 so in future?

23 A. Well, in relation to that I think one  
24 of the most important areas that was of concern to the  
25 industry certainly in the negotiations was what they

1 term security of tenure. And although the licensing  
2 system that was in place provided for relatively  
3 long-term licences, they didn't believe that it  
4 provided, in their view, that kind of security.

5 Q. Can you advise the Board what the  
6 period of licence tenure was in this period?

7 A. A number of the licences, I believe -  
8 and I am going back to memory - were for 21-year  
9 periods with renewable clauses, 21 years with renewable  
10 for a second 21. There were varying forms of the  
11 licences and I can't be any clearer about all of them,  
12 but that was a very common one.

13 Q. Renewable at whose option, the  
14 company or the government's?

15 A. At the Ministry's -- the Minister's.

16 Q. Was there a record of not renewing  
17 that you are aware of?

18 A. I can't speak to that, I am not aware  
19 of that. There may have been or there may not have  
20 been.

21 Q. Is there anybody who will be giving  
22 testimony who will be able to speak to that?

23 MR. FREIDIN: No.

24 MR. CASTRILLI: Q. Mr. Armson, would you  
25 agree with me that in this period companies also did

1 not regenerate areas that they cut because the  
2 government did not enforce such requirements?

3 A. I think many of the positions that  
4 were taken were that in the type of operations that  
5 were carried out - these were seasonal - and certainly  
6 until the late 50s they were relatively unmechanized  
7 but there was enough natural regeneration on the areas  
8 that were cutover and that they didn't require active  
9 efforts at further regeneration.

10 That was a position that was taken.

11 Q. So the answer to my question is: The  
12 government did not enforce such requirements?

13 A. No, the government did not enforce  
14 them.

15 Q. And was that of concern in the  
16 period?

17 A. It was of concern to many people,  
18 yes, I agree.

19 Q. Would you agree with me that was of  
20 concern to the Ontario Economic Council in 1970?

21 A. I believe they expressed concern,  
22 yes.

23 Q. Mr. Armson, I understand you are  
24 familiar with this document, you provided a copy last  
25 week or the week before.

1 MR. CASTRILLI: Mr. Chairman, I would  
2 like to make this the next exhibit.

3 THE CHAIRMAN: Exhibit No. 73. It is  
4 entitled: A Forest Policy for Ontario, Report of the  
5 Ontario Economic Council. Does it have a date on it,  
6 Mr. Castrilli?

7 MR. CASTRILLI: 1970.

8 THE CHAIRMAN: Yes, February 1970.

9  
10 ---EXHIBIT NO. 73: Document entitled: A Forest  
11 Policy for Ontario, Report of the  
Ontario Economic Council dated  
February, 1970.

12 MR. CASTRILLI: Q. Page 37 of Exhibit  
13 73. Page 37.

14 It is under the heading of Forest  
15 Management on the lefthand side of the page, the fourth  
16 paragraph. It is noted there, Mr. Armson:

17 "Reforestation and regeneration had..."  
18 And you will note that the OEC is speaking about the  
19 1950s:

20 "...within the Crown Timber Act been held  
21 to be the responsibility of companies  
22 operating on crown lands. However, in  
23 many cases, largely through lack of  
24 enforcement, little had been  
25 accomplished."



1                   So would you agree with me that in this  
2                   period, logging companies did not regenerate areas they  
3                   cut because the government did not enforce such  
4                   requirements?

5                   A.   They didn't regenerate them, the  
6                   reasons -- and the government didn't enforce, you are  
7                   drawing a conclusion?

8                   Q.   I am sorry?

9                   A.   Well, they didn't regenerate them and  
10                  the government didn't enforce, I agree.

11                  Q.   The paragraph clearly says:  
12                  "...largely through lack of enforcement,  
13                  little had been accomplished."

14                  Did you agree with that statement?

15                  A.   Well that, as I say the government  
16                  didn't enforce and the companies didn't do it. There  
17                  is a conclusion there and that is not an unreasonable  
18                  one.

19                  THE CHAIRMAN: Do you agree with the  
20                  conclusion reached by the Economic Council in this  
21                  report?

22                  THE WITNESS: It is one of the reasons,  
23                  and I don't think it is the only reason.

24                  MR. CASTRILLI: Q. Do you agree with the  
25                  reason given?

1                   A. As I say, it is a reason, it is not  
2 the only reason.

3                   Q. Would you say it is the predominant  
4 reason?

5                   A. Yes, I would say it is a major  
6 reason.

7                   Q. Thank you.

8                   THE CHAIRMAN: Mr. Castrilli, for the  
9 purposes of the record, I notice that this is not the  
10 entire document.

11                   MR. CASTRILLI: Yes, I am sorry. I meant  
12 to indicate that it is excerpts from the OEC Report.

13                   THE CHAIRMAN: Very well.

14                   MR. CASTRILLI: Q. Now, Mr. Armson, at  
15 paragraph 45 of your evidence on page 33 you indicate  
16 that:

17                   "Prior to 1957, logging and artificial  
18 regeneration proceeded independently and  
19 in an unco-ordinated way."

20                   And I gather from the paragraph what you  
21 are saying there, is that logging took place in the  
22 natural forests of the north and artificial  
23 regeneration took place in the south.

24                   Is that substantially correct?

25                   A. That is correct.

1 Q. I am just wondering, with respect to  
2 paragraph 45, are you suggesting that after 1957  
3 harvesting and silviculture, in particular regeneration  
4 were co-ordinated?

5 A. There was a move to co-ordination and  
6 I indicated one of the moves was an administrative one  
7 in 1956 when the two divisions, the one of Timber  
8 Management and of Reforestation were merged; and the  
9 second one I referred to again in my direct evidence,  
10 was the initiation of what was termed project  
11 regeneration in the late 50s and the bringing into the  
12 province of mechanical equipment for site preparation  
13 and taking that equipment through the province to  
14 illustrate how it could be used.

15 Q. Isn't it true that by the late 1950sa  
16 and early 1960s Ontario was faced with increasing areas  
17 requiring treatment, precisely because of industry's  
18 failure to take responsibility for regeneration  
19 efforts, and that is post-1957?

20 A. Post-1957, and in that period, I am  
21 not sure of the documentation as to the amount. There  
22 was a considerable concern both expressed by  
23 individuals, professionals and within government about  
24 the need for regeneration at that time.

25 The precise quantification, I cannot

1 speak to and I don't think it existed at that time.

2 Q. Okay. But that is the burden of the  
3 comment that we see in paragraph 4 on page 37 of what  
4 is now Exhibit 73; do we not?

5 A. Oh yes, that is correct.

6 Q. So that suggests to me, does it  
7 suggest to you, that harvesting and regeneration  
8 continued to be unco-ordinated after 1957?

9 A. They were unco-ordinated in the sense  
10 that they did not -- they were not planned together.  
11 And, as I say, within the Ministry at that time, the  
12 two administrative divisions had been brought together,  
13 so there was some move to co-ordination in that sense.

14 Q. But, things were still not going well  
15 in 1960; is that right?

16 A. That's correct.

17 Q. And that's actually reflected in your  
18 Exhibit 4, page 4. Exhibit 4 is the Class  
19 Environmental Assessment.

20 A. Yes.

21 Q. Lines 27 and 28:

22 "By 1960 it was clear that the existing  
23 system was not providing for effective  
24 regeneration."

25 Do you see that on page 4?



1 A. Yes. No, I see that.

2 Q. So that notwithstanding the Ministry  
3 re-organization in 1956, four years later things were  
4 no better?

5 A. That is correct and there was no  
6 clear line of responsibility to the Ministry at that  
7 time for regeneration, it was still left supposedly to  
8 be done by industry.

9 Q. Paragraph 47 of your evidence, and  
10 that is the paragraph where you indicate that the Crown  
11 Timber Act was amended in 1962, and then from that time  
12 until 1979 the Crown assumed full responsibility for  
13 regeneration on Crown lands.

14 Was not a major implication of the 1962  
15 amendments to the Crown Timber Act the separation of  
16 harvesting and silviculture?

17 A. That's correct.

18 Q. And this was a bad move in your  
19 opinion; was it not?

20 A. It was -- I think it was a move that  
21 was appropriate for the time. As I have indicated, and  
22 in my report later on in 1976, with the development of  
23 expertise in regeneration in the north, it became  
24 appropriate to bring them together again.

25 Q. Sorry?

1 A. Well, in order to...

2 Q. In 1962 you said it was a good  
3 move -- you said it was appropriate for the time and I  
4 am not clear on the reasons why you believe it was  
5 appropriate.

6 A. I would explain it this way. If you  
7 have two components of what should be a single  
8 enterprise and one is relatively well developed and the  
9 other is very imperfectly developed then, in order to  
10 bring them together, one might well bring one component  
11 up to a level of development so that when you merge  
12 them they at least make some kind of a compatible  
13 whole.

14 If you try and merge a component that is  
15 well developed with one that is very insufficiently  
16 developed, it often usually creates greater problems.

17 Q. But would you not agree with me that  
18 the 1962 amendments simply perpetuated and compounded  
19 the pre-1957 problem of lack of co-ordination between  
20 cutting and regeneration, except now the failure of the  
21 regeneration efforts were going to be specifically  
22 placed in the government's lap?

23 A. That is correct. But, as I  
24 explained, the development of expertise was all  
25 important.

1 Q. I think you actually indicate that  
2 elsewhere in your evidence, pages 113, 114.

3 A. That is correct.

4 Q. You note at the bottom of page 113:  
5 "In 1962 the amendment to the Crown  
6 Timber Act placed full responsibility for  
7 regeneration with the province.  
8 Logging and silviculture were effectively  
9 divorced and yet within slightly more  
10 than a decade this divorce has resulted  
11 in serious handicaps to effective  
12 reforestation and silviculture."

13 So that to repeat my question earlier:  
14 This separation as result of the 1962 amendments was a  
15 bad move; was it not?

16 A. In those terms that you put it, it  
17 can be construed that way, yes.

18 Q. It resulted in less, not more  
19 co-ordination?

20 A. It is very difficult to co-ordinate  
21 component for which you do not have the appropriate  
22 skills and expertise.

23 Q. So the answer to my question is: It  
24 resulted in less, not more co-ordination?

25 A. That's within the company, yes.

1 Q. And this was after 1957; was it the  
2 not?

3 A. That's correct.

4 Q. And just for the record, Mr. Armson,  
5 paragraph 29 of your evidence, which happens to be at  
6 page 29.

7 I believe you are indicating -- can you  
8 confirm for the Board and for me that there was  
9 separation of harvesting and regeneration at the turn  
10 of the century in the sense that they proceeded  
11 independently of each other?

12 A. At the turn of the century?

13 Q. Yes.

14 A. There was no organized regeneration  
15 at the turn of the century, to my knowledge.

16 Q. So it cannot be said they proceeded  
17 independently of one another, only one thing was  
18 happening, that was cutting; is that correct?

19 A. That's correct.

20 Q. Thank you. Paragraph 50 of your  
21 evidence. You are referring there to the Brodie Report  
22 of 1967 and you note that it emphasized improving  
23 timber management practices.

24 Would you agree with me that Brodie also  
25 was concerned about tourist and recreational aspects of



1 the forest?

2 A. Yes, he did. He referred to those  
3 other uses, yes.

4 Q. He actually makes that reference at  
5 page 110 of Exhibit 60; does he not?

6 Sorry?

7 A. I am looking for Exhibit 60. If you  
8 could take me in that direction.

9 Q. Sure.

10 A. My documents don't have the exhibit  
11 numbers on them, so I don't know.

12 Q. It is the Brodie Study Unit Report,  
13 excerpts.

14 A. I have it now.

15 Q. All right. Mr. Armson, referring  
16 there at page 110 to Exhibit 60.

17 A. Yes, I have that.

18 Q. And Brodie is there referring to an  
19 actually recommended -- well, actually it is not a  
20 recommendation per se. It is the last sentence of that  
21 first paragraph:

22 "Recreational use of forest lands in its  
23 broadest implications is a product of  
24 economic growth, increased incomes and  
25 more leisure and it is itself an

1 industry contributing substantially to  
2 the overall economic growth of the  
3 province."

4 Do you agree with that?

5 A. Yes.

6 Q. And would you agree with the  
7 recommendation that appears on that page, it is  
8 Recommendation 1: "

9 "A sustained high rate of economic growth  
10 in its broadest sense to achieve full  
11 Utilization of the forest resource be the  
12 aim of public policy and the multiple use  
13 management of forest lands."

14 A. Yes, I agree that's a desirable  
15 objective.

16 Q. Now, at paragraph 51 of your evidence  
17 you talk about government making long-term financial  
18 commitments with respect to timber management.

19 Do you have that page?

20 A. Yes, I do have paragraph 51.

21 Q. Can you clarify for me -- are you  
22 referring there to the -- I presume you are referring  
23 there as well to the long-term financial commitments to  
24 the industry for such things as regeneration?

25 A. I am referring to, in this specific

1 paragraph, to governments; they are representing the  
2 landowners and, therefore, have the prime obligation.

3 Q. Now, in response to a question from  
4 Mr. Cosman, I believe it was in Volume XIII - if you  
5 will accept the reference subject to verifying the  
6 page - you testified that government does not pay all  
7 silviculture costs on FMA lands.

8 Do you recall that question and answer?

9 A. Yes, I do. Yes, yes.

10 Q. Would you confirm for me that at the  
11 commencement of the FMA regime in 1979-80 the  
12 government fully subsidized regeneration?

13 A. No, I don't believe we did.

14 Q. Can you advise the Board what  
15 percentage of regeneration on FMA lands is subsidized  
16 by the government?

17 A. I cannot tell you that. I only know  
18 the basis for the payments and that was the Ministry's  
19 costs at that time.

20 Q. Can you advise the Board who will be  
21 giving evidence on that aspect?

22 MR. FREIDIN: Nobody at the moment.

23 MR. CASTRILLI: Q. So is it your  
24 testimony: Nobody knows how much money the government  
25 gave or gives to industry--

1 A. Oh no.

2 Q. --with respect to regeneration?

3 A. The amount of money that's paid to  
4 companies for the purposes under the terms of the  
5 agreement is documented.

6 Q. No, I am sorry, I think that's the  
7 question I asked and that's a fair answer. The  
8 percentage, contribution of government?

9 A. To the actual -- to real costs, in  
10 total?

11 Q. Total costs.

12 A. I am unclear, Mr. Chairman, just as  
13 what we're....

14 THE CHAIRMAN: I think he wants to know  
15 the percentage of the money given by government as it  
16 relates to the total costs of regeneration.

17 Is that not correct, Mr. Castrilli?

18 MR. CASTRILLI: Yes, that's correct.

19 THE WITNESS: In the total -- I cannot  
20 answer that in totality.

21 MR. CASTRILLI: Q. And your testimony  
22 is: No one will be giving evidence with respect to  
23 that from the Ministry?

24 A. Not to my knowledge.

25 Q. And is it your also your testimony



1       that no one knows the answer to my question within the  
2       Ministry of Natural Resources?

3               A. I do not believe any one within the  
4       Ministry of Natural Resources knows what the total  
5       company costs are for regeneration for FMAs. I don't  
6       know that they would have any way of knowing that.

7               Q. So your testimony is no one within  
8       the Ministry of Natural Resources knows how much  
9       industry pays for regeneration on FMA lands?

10              A. That's correct.

11              Q. I ask you generally: Why does the  
12       Ministry of Natural Resources take the position that  
13       the government must make long-term financial  
14       commitments of this nature?

15              A. Because the government represents the  
16       landowners.

17              Q. Well, shouldn't the forest business  
18       or the forestry business be self-supporting?

19              A. Well, I presume it is  
20       self-supporting. I am clear it pays monies for the raw  
21       materials set by the landowner and that's the  
22       component. I am not quite clear about what you mean by  
23       self-supporting.

24              Q. Well, wasn't it the position of of  
25       the Ontario Economic Council in 1970 in its report on

1 Ontario forest policy that the forestry business should  
2 be self-supporting?

3 A. That was the statement they made. I  
4 was as unclear when they made it, as I am now.

5 Q. Let's refer to page 13 of Exhibit 73.

6 MR. FREIDIN: What page?

7 MR. CASTRILLI: 13.

8 Q. Then the paragraph - or, no, it is  
9 not the complete paragraph. The first paragraph on the  
10 page, but it is the paragraph at the top of the page,  
11 the sentence beginning:

12 "If money for this purpose..."

13 Do you see that?

14 A. Yes, I do. I see that.

15 Q. The Council there is indicating that  
16 "If money for this purpose..." and they  
17 are speaking there of forest management practices.

18 A. Yes.

19 "...is not provided from the operation of  
20 the present stands, we will eventually be  
21 in the position of having to rely on  
22 funds made available from the  
23 consolidated revenue of the province to  
24 promote a business that should be  
25 self-supporting."

1                   Now, is it your testimony you don't  
2 understand that proposition by the OEC?

3                   A. I don't necessarily agree with the  
4 proposition and I think they have misconstrued, in my  
5 opinion, the nature of the relationship.

6                   MR. MARTEL: Can you tell me what page  
7 that is on?

8                   MR. CASTRILLI: Page 13 of Exhibit 73,  
9 the top paragraph on the page.

10                  Q. I am sorry, Mr. Armson, had you  
11 completed your answer to that question?

12                  A. Yes, unless you want further  
13 elaboration.

14                  Q. So your testimony was: You don't  
15 agree and you believe the OEC did not understand what  
16 it was saying?

17                  A. That's correct.

18                  Q. And in what respect do you believe  
19 the OEC is misguided?

20                  A. In this respect: That in the nature  
21 of the forestry -- forests of the forestry operations  
22 that they are discussing here, essentially northern  
23 Ontario, it is a matter of entering upon a natural  
24 forest and putting in place, at considerable cost -  
25 whether that be borne by government or industry - an

1 infrastructure in order to use that resource. And we  
2 are speaking here, and they are speaking primarily,  
3 timber, but for whatever uses.

4 It, therefore, means that there is a  
5 considerable investment and that the natural forest  
6 itself which provides a certain amount of revenue, may  
7 or may not - and in most cases here, I would submit -  
8 could not supply that order of magnitude of revenue  
9 without, in effect, meaning that the cost of  
10 infrastructure and the maintenance of the industry  
11 could not proceed.

12 As a simple example I would separate the  
13 cost of entering and putting in the infrastructure into  
14 a forest for use or industry, whatever that industry  
15 may be, timber or otherwise, and distinguish that in  
16 the initial stages from the costs and investments which  
17 can be quite large of, in fact, providing management  
18 for that resource, and I think that -- and installing,  
19 in terms of timber, a new forest.

20 Now, one hopes over time that you then  
21 move to that position of self-support, but as long as  
22 you are bringing a large natural forest which, for the  
23 most part, does not contain a management infrastructure  
24 into position, you will have to make - I would submit  
25 in most instance s- considerable investments over and



1       above that of the returns you get from the commodity --  
2       from the material itself.

3                   Q.   I want to just go back to an answer  
4       you gave previously that no one knows how much the  
5       industry, the proportionate share that industry is  
6       paying for regeneration.

7                   Is it your position that the public  
8       should not know whether it is contributing one hundred  
9       per cent to regeneration efforts in this province, or  
10      10 per cent, or some figure inbetween?

11                  A.   The public should know what it costs  
12      to manage their forests.  Particularly where we do have  
13      those costs readily available to the public, that is on  
14      Crown management units.

15                  Q.   Yes, I am always only speaking of  
16      Crown management units.

17                  A.   And if, therefore, those are the  
18      costs of managing or carrying out whatever activities,  
19      then when some other person or company is carrying it  
20      out on behalf of the owners, it seems reasonable to me  
21      that those -- that would be a benchmark.

22                  Q.   Sorry, had you completed your answer?

23                  A.   Yes.

24                  Q.   I am still not clear on the answer to  
25      my part of the question and, that is:  Should the

1 public know exactly what percentage it is contributing  
2 to regeneration on Crown forests, and what percentage  
3 is contributed by the industry?

4 I mean, if you don't know, isn't it  
5 conceivable that in fact the government and the  
6 provincial taxpayer is paying 100 per cent for all  
7 regeneration efforts on Crown lands?

8 A. They may or they may not be, but if  
9 they are paying what they would normally do if they  
10 were doing it themselves, it seems to me that there is  
11 a position there.

12 If the government wishes to require all  
13 companies to open their books so that -- that's another  
14 matter, but I am not competent to deal with that one  
15 nor is...

16 Q. Well, you have been qualified as an  
17 expert in public policy and you have given evidence  
18 that relates to this area and so I am simply asking  
19 you: Is it reasonable for the public to know how much  
20 money the public is contributing and, more  
21 particularly, not how much money, the percentage  
22 contribution the public is making to regeneration on  
23 Crown lands?

24 A. I think it would be reasonable for  
25 them to know what the proportion might be, but what the

1 precise figures are for any company, I think that's  
2 another matter.

3 THE CHAIRMAN: Well, there is two things  
4 there: If you are going to give the proportion, you  
5 are really giving a percentage; are you not?

6 THE WITNESS: But that may be for the  
7 industry under forest management agreements  
8 collectively. Obviously it will vary considerably from  
9 company to company, from time to time, from year to  
10 year and I don't whether that will succeed in providing  
11 the public with important or relevant information.

12 MR. MARTEL: Shouldn't the public know  
13 the amount of money, the percentage of the money?  
14 Since they are the taxpayers paying that amount of  
15 money, shouldn't they know how much they are putting up  
16 to the industry?

17 THE WITNESS: Well, they do know that,  
18 sir.

19 MR. MARTEL: How? I just heard you --  
20 unless I misread what you were saying to Mr. Castrilli.  
21 He has been trying to fish that answer out for some  
22 time, and no one apparently is going to give evidence  
23 to that over the number of panels that are going to  
24 appear before the Board.

25 THE WITNESS: With respect, Mr. Martel,

1 the public does know what the public or government is  
2 paying for specific activities. They don't know what  
3 the companies are paying over and above that.

4 MR. MARTEL: So in essence the public  
5 doesn't know what their share of the cost of  
6 reforestation is, what percentage they are paying; the  
7 amount of money they are putting in.

8 They only know that they are putting in  
9 "x" numbers of dollars, they don't know if that  
10 represents 75 per cent of the costs of reforestation,  
11 40 per cent of the costs, 20 per cent of the costs,  
12 they don't know that?

13 THE WITNESS: That's correct.

14 MR. MARTEL: And you don't think that  
15 they should know that?

16 THE WITNESS: I don't think that that, on  
17 an individual basis, is relevant information in terms  
18 of making a decision.

19 I think the key point is whether if -- as  
20 a landowner, if I know what it costs to do it if I  
21 don't have someone else do it; well, that is the  
22 benchmark that I would use.

23 MR. MARTEL: That's strange. The  
24 taxpayer should have a right to know, should he not,  
25 the amount that he's paying for the best game in town,



1 let me put it that way.

2 And, if not, why not, since he is footing  
3 the bill or part of it.

4 I mean, if you were buying a house, Mr.  
5 Armson, and somebody said to you: You put up \$30,000,  
6 it doesn't matter what the house costs, you just put  
7 \$30,000 up. Would you put the 30,000 in?

8 THE WITNESS: Well, if I knew what kind  
9 of house I was getting and the specifications of the  
10 house, I would make a decision on that.

11 MR. MARTEL: But you wouldn't know the  
12 total cost of the house.

13 THE WITNESS: It may or may not be  
14 relevant.

15 MR. MARTEL: But I am only going to give  
16 you half a share. Now, you might be paying for 90 per  
17 cent of it, but I am only going to give you half a  
18 share.

19 THE WITNESS: Ah, but the share of the  
20 resource we are talking about is still 100 per cent  
21 owned by the public.

22 MR. MARTEL: But they don't know what  
23 percentage -- they are not getting the revenues, though  
24 come back to them, a percentage rather, in the form of  
25 stumpage and so on.

1 THE WITNESS: Well, they know what those  
2 revenues are, but I would submit, Mr. Martel, that  
3 there are many other costs.

4 If we were to single out only those for  
5 which payments are made, that's one matter, but there  
6 are many other costs for which we do not reimburse for  
7 good reason.

8 Those are costs of carrying out those  
9 activities, and they are not -- we don't pay a penny,  
10 the public doesn't pay a penny for those.

11 MR. MARTEL: And should they?

12 THE WITNESS: That's again a matter of  
13 decision.

14 MR. MARTEL: That's right. But as long  
15 as -- for the items that they are putting the money up  
16 for, you would agree, that they should know what  
17 percentage they are paying?

18 I mean, if they are not putting up some  
19 of the money for another component of the operation,  
20 that's not of any relevance to them because it isn't  
21 their money, but when it is their money involved,  
22 surely they have a right to know.

23 THE WITNESS: Well, I guess I have a  
24 difference of opinion, Mr. Martel.

25 MR. MARTEL: Let's go back to the house

1 proposition then. I can sell you a house, I can take  
2 you in as a partner and ask you to put up a certain  
3 percentage of the money and not tell you what  
4 percentage of the house you are going to get?

5 THE WITNESS: As long as the conditions  
6 of the house were satisfying me, I would say yes or no.

7 MR. MARTEL: I would take you as a  
8 partner then.

9 THE CHAIRMAN: Go ahead.

10 MR. CASTRILLI: Q. Mr. Armson, we were  
11 discussing generally the question of whether the  
12 forestry industry should be self-supporting, and I  
13 referred you to the quote at the top of page 13 of  
14 Exhibit 73, and you gave your answer in response to  
15 what you believed to be the understanding or  
16 misunderstanding of the OEC.

17 And I am just wondering: Would you not  
18 agree that it would be more reasonable to develop  
19 forest operating companies to ensure wood supply at the  
20 lowest possible cost commensurate with sound forestry  
21 practice?

22 A. In certain situations it might be an  
23 option, but I don't think in general that would be, in  
24 my view, a solution to what might be perceived as a  
25 problem.

1 MRS. KOVEN: Excuse me, Mr. Castrilli.  
2 What is a forest operating company?

3 MR. CASTRILLI: I am coming to that.

4 Q. Mr. Armson, wasn't that a proposal of  
5 Commissioner Kennedy in 1947?

6 A. Yes, it was.

7 Q. At page 188 --

8 THE CHAIRMAN: Just a moment, Mr.  
9 Castrilli.

10 Mr. Freidin?

11 MR. FREIDIN: Mr. Chairman, I think this  
12 might be an appropriate time for me to raise the  
13 concern that I have with the line of questioning which  
14 is directed towards operating companies or different  
15 forms of licensing by the province.

16 The type of evidence which is being  
17 elicited today and perhaps later today, about what  
18 would or would not be a better management strategy for  
19 industry - and I raise that concern because it is my  
20 submission, Mr. Chairman, that the Board is not here to  
21 determine whether the licensing scheme used in timber  
22 management is appropriate or should be changed, that it  
23 is not the responsibility or the function of this Board  
24 to review whether in fact market strategies should be  
25 different than what they are.



1                   Now, I say that for a number of reasons.  
2           The undertaking which is before the Board is the  
3           undertaking as defined. It is the four activities.

4                   Under the Environmental Assessment Act,  
5           the Board must assess the environmental effects of  
6           those four activities as clearly defined, including the  
7           social economic environment, and they must determine  
8           what are the positive effects and what are the negative  
9           effects.

10                   And it is my submission that what the  
11           Board should concern itself with examining those  
12           activities to determine their effect or potential  
13           effect on the natural environment, but at this level  
14           where we are talking about getting into the area of,  
15           particularly Panel No. 5, the economic contribution or  
16           the effect on the economic environment, that what the  
17           Board's responsible to do is to say -- is to assess:  
18           What are the activities and what are the positive  
19           environmental effects and what are the negative  
20           environmental effects.

21                   THE CHAIRMAN: But how can we possibly  
22           assess the impacts, positive or negative, on the four  
23           activities put forward if we can't look at the economic  
24           infrastructure that supports or doesn't support those  
25           activities?

1                   In other words, if you are looking at  
2                   regeneration as one of activities, or access as another  
3                   one of the activities, surely the manner in which those  
4                   activities are carried out depends on the economic  
5                   viability of the industry to support those activities  
6                   or not to support those activities, to require support  
7                   from elsewhere, such as the government.

8                   And, under the Environmental Assessment  
9                   Act, we are looking at all of the activities as they  
10                  impact on not only the natural environment but on the  
11                  economic and social environment of Ontario, and when  
12                  you have an industry that is very much tied in to the  
13                  province, in terms of regulation and/or support in  
14                  certain forms, such as payments being made to companies  
15                  for reforestation, certainly that effects the economic  
16                  and social environment as well, particularly the  
17                  economic.

18                  MR. FREIDIN: All right. We can look  
19                  at --

20                  THE CHAIRMAN: I am not saying that we  
21                  are in a position necessarily to, in a decision, make a  
22                  recommendation or pose, as a condition, certain things  
23                  in terms of economic payments that should or shouldn't  
24                  be made. I am not necessarily saying that but, in  
25                  order to ascertain whether or not the impacts are of a

1 positive or negative nature, surely we have to have  
2 some information on the economic activity which is  
3 underlying those impacts.

4 MR. FREIDIN: All right. The purpose of  
5 the evidence would be to indicate -- to counter maybe  
6 evidence given as to the positive environmental  
7 effects, in many terms.

8 I understand your point, and my concern  
9 is --

10 THE CHAIRMAN: Let's just take a  
11 hypothetical example. If it turned out that the  
12 economic activity generated by the industry was such  
13 that in order to be competitive world wide or wherever  
14 the markets are, the industry could not support any  
15 reforestation on their own, and it would have to be  
16 fully subsidized by government, then that has an  
17 impact, does it not, on the economic environment  
18 surrounding the activity for which approval is sought;  
19 i.e., harvesting, reforestation, access, et cetera?

20 MR. FREIDIN: It would not have an effect  
21 on -- in that hypothetical, I mean -- my concern with  
22 dealing with the hypothetical, Mr. Chairman, is the  
23 purpose for which we deal with the evidence. I mean,  
24 you have indicated that there are certain things the  
25 Board can or cannot do, and I am suggesting that

1        setting a term or condition that the licensing system  
2        be changed or setting a term or condition that the  
3        amount of money that government gives to industry as to  
4        defray certain costs, those are things which, in my  
5        submission, the Board wouldn't be getting into.

6                THE CHAIRMAN:    We would not be  
7        necessarily getting into them per se, but surely we  
8        would be getting into comment on the impact that these  
9        economic implications have vis-a-vis the activities for  
10       which you are speaking approval.

11               MR. FREIDIN:    I guess there's another --  
12       well, maybe I can put my concern this way:    The  
13       relevant question for this Board is not who does it -  
14       and that's where my friend, I understand his  
15       cross-examination is going - but what, in fact, is  
16       happening now, what's the effect of those activities  
17       out there in the forest on the environment.

18               THE CHAIRMAN:    But we are looking at an  
19       overall planning process.    I think it is fair game for  
20       any of the parties to explore what has happened in the  
21       past in terms of the planning mechanisms that underlie  
22       this whole industry and the activity arising out of the  
23       planning process that is in place, and indicate through  
24       evidence how it has changed and, leading up to the way  
25       it is today and leading up, I suppose, to what you are



1 proposing.

2 And in order for the Board to get sort of  
3 some sense of continuity as to the way it was, the way  
4 it has been either improved or it has regressed in some  
5 cases, up to where we are today, I think involves a  
6 consideration of understanding the overall picture, and  
7 you are well aware that the definition of environment  
8 under this Act is very broad and it includes social and  
9 economic impacts.

10 MR. CASSIDY: Mr. Chairman, just a few  
11 brief remarks in that regard. I share Mr. Freidin's  
12 concern about the concept that this Board consider the  
13 marketing strategies or some sort of licensing  
14 requirements for imposing conditions in respect of the  
15 licensing requirements that are aimed at trying to tell  
16 the industry how to better market itself or better  
17 develop its marketing structure.

18 THE CHAIRMAN: No, that is not what the  
19 Board has said; that is not --

20 MR. CASSIDY: I am glad to hear that.

21 THE CHAIRMAN: That is not necessarily  
22 the area that the Board is getting into, but what the  
23 Board is saying is, is that it should have an  
24 understanding of what these licensing requirements are  
25 to understand how, what results from these licensing

1 requirements, impacts on the activities for which  
2 approval is being sought, and I think Mr. Castrilli's  
3 questions are along that road.

4 Mr. Castrilli, do you have anything to  
5 add to this debate, discussion?

6 MR. CASTRILLI: I presume that you are  
7 not about to make an order restricting my  
8 cross-examination, so I won't say anything other than  
9 to say that: You notice my questioning has been very  
10 closely adhering to the text of the evidence of Exhibit  
11 53. It is Mr. Armson, not myself, who has been talking  
12 about government making financial and long-term  
13 commitments and it is not clear from this text who he  
14 is talking about long-term commitments to.

15 So it is entirely reasonable and fair for  
16 me to -- and appropriate for me to be raising that in  
17 cross-examination. It is also Mr. Armson and not  
18 myself who has brought in the Kennedy Commission, for  
19 example, as a relevant document for consideration by  
20 this Board. It is entirely relevant and appropriate  
21 for me to explore that as well.

22 THE CHAIRMAN: I think it is self-evident  
23 that almost all of these reports that we are going to  
24 be dealing with in one form or another, whether it is  
25 the Baskerville Report, the Fahlgren Report, the

1 Kennedy Report, the Economic Council's Report, et  
2 cetera, are going to deal with some of the financial  
3 aspects of the industry vis-a-vis government which, I  
4 would suggest to you, comes back to some of the  
5 criteria that are taken into the development of any  
6 planning process to regulate or manage this industry,  
7 and the activities that the industry would be carrying  
8 out for which approval is sought.

9 MR. FREIDIN: Sorry, I didn't understand  
10 the last part of your remarks, Mr. Chairman, and  
11 perhaps before you clarify that, I agree that there is  
12 nothing wrong with, as a means of background  
13 information, to put things in perspective that this  
14 line of questioning to a certain point takes place.

15 I mean, we put Mr. Armson up here to talk  
16 about history to give you some context. If my friend  
17 wants to, you know, indicate that the context is  
18 somewhat different or wants to expand on that, that's  
19 fine.

20 THE CHAIRMAN: Yes, but some of that - I  
21 think the Board agrees with Mr. Castrilli - a lot of  
22 that is raised to some extent in Mr. Armson's own  
23 evidence, in his own witness statement; there is  
24 reference made to some of these items.

25 I mean, why can't, in a

1 cross-examination, Mr. Castrilli explore some of the  
2 statements made and expand upon it?

3 MR. FREIDIN: I am not suggesting that he  
4 can't go into it and expand on it, I am suggesting that  
5 somewhere - if my understanding of the matters which  
6 this Board can properly deal with is correct - that  
7 there may be some point at which you have got to say:  
8 This is getting into that other area.

9 Maybe the time to raise this matter is  
10 not right now, better that I raise it now and get  
11 people thinking about it than wait six months.

12 THE CHAIRMAN: Okay. If your objection  
13 when you first arose, Mr. Freidin, was to invite the  
14 Board to restrict Mr. Castrilli's cross-examination of  
15 the witness on these matters, I suppose the request is,  
16 therefore, denied.

17 Continue.

18 MR. CASTRILLI: Mr. Chairman, I am  
19 wondering --

20 MRS. KOVEN: Do you want lunch, Mr.  
21 Castrilli?

22 THE CHAIRMAN: Sorry, Mr. Castrilli,  
23 continue.

24 MR. CASTRILLI: Mr. Chairman, I wonder if  
25 it wouldn't be appropriate to have a luncheon break at



1       this time?

2                   THE CHAIRMAN: I suppose we can all  
3 collect our thoughts over lunch.

4                   Very well, we will adjourn until 2:00  
5 p.m.

6                   MR. CASTRILLI: Thank you.

7 ---Luncheon recess at 12:30 p.m.

8 ---Upon resuming at 2:05 a.m.

9                   THE CHAIRMAN: Thank you, ladies and  
10 gentlemen. Please be seated.

11                   Mr. Castrilli?

12                   MR. CASTRILLI: Thank you, Mr. Chairman.

13                   Q. Mr. Armson, we were discussing before  
14 the break the issue of the percentage regeneration  
15 funding by the province, and I was wondering if you  
16 could perhaps explain to me and to the Board how a  
17 determination is made on a particular management unit  
18 that regeneration is necessary and how much will be  
19 necessary for a benchmark level of regeneration to  
20 succeed?

21                   Do you normally require contractors to go  
22 out on a site and determine what regeneration is  
23 necessary and how much -- and estimate for the company  
24 and the Ministry how much that will cost?

25                   A. No. The regeneration, as I

1 explained, the payments for regeneration, in terms of  
2 payments, are based on a per unit cost. In the case of  
3 planting, it would be per thousands of trees -- per  
4 unit of thousands of trees.

5 The areas to be regenerated, the extent  
6 and the nature of the regeneration, first of all, is  
7 set in the silvicultural prescriptions, in the ground  
8 rules which are a schedule to each of the agreements  
9 and which are revised annually, and also that  
10 information would be -- would obtain in the timber  
11 management plan, in terms of the amounts and what are  
12 done.

13 The decisions as to the amounts and so on  
14 are related to the work plan and, obviously, in  
15 relation to available budgets.

16 Q. And that would -- excuse me, would  
17 that be on a management unit-by-management unit basis?

18 A. Yes, that would be on a management  
19 unit basis.

20 Q. So if one were to look at the  
21 management unit and have a contractor review what would  
22 be necessary, you might be able to come up with a  
23 figure, total -- an expenditure or an amount that would  
24 be necessary to regenerate to the level anticipated?

25 A. If I might clarify, the use of the

1 word -- the contractor doesn't determine how much  
2 regeneration is required. The company and the Ministry  
3 foresters are the ones who would do that, the company  
4 in the FMAs.

5 The contractor who carries out the  
6 regeneration either for an FMA holder, if it is  
7 contracted by the FMA holder, or by the -- on a Crown  
8 unit for the Ministry, that contract would be let in  
9 relation to terms and conditions set by the Ministry.

10 Q. So there is a contract for each unit,  
11 management unit?

12 A. There may not be. Different units  
13 will handle it in different ways.

14 Q. Sorry, were you finished?

15 A. Well, I was just going to explain  
16 that in some situations the nature of the work may be  
17 undertaken by contractors; that is, regeneration  
18 contractors in terms of the carrying out, or it may be  
19 undertaken by a licensee non-FMA on a Crown unit, or it  
20 may be undertaken by Ministry staff.

21 Q. What I am getting at though is: For  
22 each management unit do you know what the  
23 expenditure -- total expenditure is going to be for  
24 regeneration, regardless of what level you decide to  
25 regenerate to?

1 A. Yes, those numbers would be in...

2 Q. And would you agree with me that  
3 would be your benchmark number?

4 A. That is a number that is out there.  
5 I don't want to confuse; the payments to the FMA  
6 holder, which are based and set each five years on the  
7 related costs of doing the same work on a Crown unit in  
8 that same general area.

9 Q. What I am getting at is: If you know  
10 a number; that is to say, a figure which is going to be  
11 expended for the purposes of regeneration, do you not  
12 also know, therefore, how much is contributed by the  
13 Ministry on any particular unit?

14 In other words, you simply subtract from  
15 the benchmark.

16 A. You know what is paid by the  
17 Ministry. I don't know what -- you are not subtracting  
18 from anything, that is what is paid by the Ministry.

19 Q. What may be paid by the Ministry may  
20 be a different number from what is, in fact, necessary  
21 to complete the regeneration that is deemed appropriate  
22 for the particular management unit; is it not?

23 A. Well, I would like to be clear. Are  
24 we talking about a forest management agreement area or  
25 are we talking about a Crown management unit, because



1       there seems to be -- to me, there is some confusion.

2                   Q.   Let's talk about FMAs.

3                   A.   All right.  Then on the FMA, the  
4       costs that are paid for any given five-year period are  
5       based on Ministry costs at the time that those rates  
6       are established.  They are carried forward for a  
7       five-year period and there is an adjustment made  
8       according to the Treasurer's inflation rate; that is,  
9       for silvicultural costs, and these are essentially the  
10      basic costs of regeneration, site preparation, planting  
11      or seeding - and I will indicate exactly the details of  
12      the planting, how the planting rate is determined - and  
13      a treatment we call tending to the condition of what we  
14      term free to grow.  So some subsequent treatment to get  
15      the crop fully established.

16                   The rate for site preparation and so on  
17      is on a per unit area basis.  In terms of planting, the  
18      provision is that we provide the stock free of charge  
19      and the rate that is set for planting is a provincial  
20      rate - this was agreed to in negotiations - and applies  
21      as a cost of payment of dollars per thousands of trees  
22      that are planted.

23                   For each in the prescriptions; the  
24      densities, the number of trees that need to be planted,  
25      are specified in the ground rules.

1 THE CHAIRMAN: But I am not sure you are  
2 answering Mr. Castrilli's question.

3 As I understand what he is asking, it is  
4 simply: On a five-year period for an FMA, would you  
5 forecast how much regeneration is needed, whether that  
6 figure is arrived at in conjunction with discussions  
7 with a company or not, and having gotten that figure,  
8 were you to do it completely on your own there would be  
9 a cost involved for the five-year period?

10 THE WITNESS: That is correct.

11 THE CHAIRMAN: And that cost, I take it,  
12 could be computed?

13 THE WITNESS: That can be computed and,  
14 in fact, the projection for each of the five-year  
15 periods is in the timber management plan, that contains  
16 those projections for the numbers of hectares that  
17 are...

18 THE CHAIRMAN: And then I think he is  
19 asking the further question that you then take a look  
20 at what was projected and then you deduct from that the  
21 amounts that are actually paid for others to do it, at  
22 whatever the Ministry rates are for those types of  
23 individual tax.

24 THE WITNESS: No, there isn't -- somehow  
25 I am not being clear here.

1                   The payment -- if we start in year 1988,  
2                   for example, with an extension to the agreement, the  
3                   ground rules are developed for the prescriptions. The  
4                   Ministry then says: For site preparation, whatever, we  
5                   will pay you "x" dollars per hectares that are to be  
6                   site prepared. In the timber management plan there  
7                   will be, over the five-year period, a number of -- an  
8                   area and numbers quantified that are to be treated.

9                   Okay.

10                  Now, the payments will be for hectares  
11                  that are treated and those rates will change over the  
12                  five year according to the agreement as some inflation  
13                  factor is built in.

14                  So that the amount, yes, you can say what  
15                  the total projected hectares are to be treated, you  
16                  know what the initial rate it is, you don't know what  
17                  the inflation factor will be --

18                  THE CHAIRMAN: No, no, but stop right  
19                  there. If you can project what the total amount of  
20                  area is to be treated--

21                  THE WITNESS: Yes.

22                  THE CHAIRMAN: --you could project  
23                  supposedly a cost for somebody to treat that total area  
24                  if they met the complete terms of the agreement and  
25                  treated in fact that whole area?

1 THE WITNESS: That is correct.

2 THE CHAIRMAN: Okay. From that projected  
3 figure, could you not take the figure over the five  
4 years that was actually paid to others than the  
5 Ministry for that treatment?

6 THE WITNESS: Yes.

7 THE CHAIRMAN: And get some figure?

8 THE WITNESS: Yes, you could.

9 THE CHAIRMAN: I think what Mr. Castrilli  
10 is asking - and correct me if I am wrong, Mr.  
11 Castrilli - those two figures may differ?

12 THE WITNES: Yes. In fact, the simplest  
13 way to get that, Mr. Chairman, is that when you reset  
14 the rate at the five-year period, you are resetting it  
15 according to what we are then paying in terms of the  
16 Ministry.

17 And what we have found historically - and  
18 we have gone through three five-years periods to date -  
19 is that the rate at which we are paying for  
20 regeneration, let's say 1988, to set the new -- is I  
21 believe - I wouldn't say in all cases - but I believe  
22 it would be substantially greater than the rate that we  
23 have wound up paying the company as a result of setting  
24 the rate five years previous and applying the inflation  
25 factor.



1                   That certainly was true in the first  
2                   five-year period because I remember looking at those  
3                   figures particularly.

4                   They are readily obtainable because all  
5                   you do is compare the set rates at the beginning of  
6                   each five-year period.

7                   THE CHAIRMAN: But this is all geared,  
8                   Mr. Castrilli, is it not, to finding out if somebody  
9                   else is kicking in any money along the line?

10                  MR. CASTRILLI: Yes, it is.

11                  THE CHAIRMAN: Okay.

12                  MR. CASTRILLI: Q. Just so I am clear  
13                  then, you are indicating to the Board that this  
14                  information is now produced in the five-year reviews?

15                  A. No, it is not produced in the  
16                  five-year reviews, but the payments which are public at  
17                  the beginning of each five-year review are there and  
18                  they can be compared with the payments that were made  
19                  over the five-year period because that is, again,  
20                  public knowledge.

21                  Q. Aren't the areas going to be  
22                  different over a five-year period? I mean, you are not  
23                  comparing the same thing when you are looking at two  
24                  different five-year periods; are you?

25                  A. Well, the payments are made on a per

1 unit treatment basis.

2 MR. MARTEL: Maybe I can help just a bit.

3 Isn't it true that you establish, at that  
4 time the FMA is signed, the amount that the industry,  
5 providing it meets all its obligations - let's use a  
6 hypothetical figure of \$10-million - we know that if  
7 they look after everything over 20 years at five-year  
8 intervals it could cost the Crown \$20-million or  
9 \$10-million provided all of the targets are met and  
10 then the adjustments are made.

11 THE WITNESS: No, we don't do it that  
12 way.

13 Mr. Chairman, I guess my background is  
14 coming out. I am looking for a blackboard, but we  
15 don't have one, because I think graphically this could  
16 be presented, but...

17 THE CHAIRMAN: Well, we should have a  
18 flip chart somewhere.

19 MR. CASTRILLI: It is outside.

20 THE CHAIRMAN: Oh, it is just outside the  
21 door. Perhaps somebody --

22 MR. FREIDIN: We actually have a number  
23 of flip charts back there with the satellites.

24 THE WITNESS: If I may, Mr. Chairman, I  
25 will use one example and I will use either planting or

1 site preparation, but the principle is the same.

2 In year one or in preparation for year  
3 one, the Ministry and the FMA holder -- on the basis of  
4 the Ministry's cost that year for site preparation --  
5 the Ministry informs the FMA holder that in terms of  
6 payments that will be - for the sake of simplicity, I  
7 will say that we will pay them \$300 a hectare because  
8 on Crown units and so on we are paying contractors,  
9 that is our cost. Okay.

10 So that is entered into. In terms of  
11 year one, and that is the rate and it is also agreed  
12 that over the time, according to the agreement, that  
13 that will increase or decrease, but in terms of a  
14 Treasury set rate. Okay.

15 So now we come through year two, year  
16 three, year four, and year five, and at year five the  
17 Ministry is paying -- again, hypothetically, there has  
18 been percentage increases, and for the sake of argument  
19 is paying the company \$369 per hectare that year for  
20 agreed to work that was supposed to be done in that  
21 year, okay, so that is the rate.

22 Now, in year five, you get ready -- you  
23 are getting ready for your next five-year period. So  
24 you are going into - this is the first five-year  
25 period, then you are going into the second period here.

1       So this is now year six.

2                   The Ministry then looks at: What rate is  
3       it setting -- or paying for work on its area. And what  
4       I was saying to the Board was that certainly in the  
5       first five-year period- because I looked at those  
6       numbers myself, and I would suspect this is true, in  
7       fact, for most of the sequences - but we find that we  
8       are paying, on our own operations, something of the  
9       order - I don't know what the order of magnitude - but  
10      it is in excess of that and, for the sake of argument,  
11      I will call it \$395. Okay.

12                   So what we find generally then, if you  
13      look at this in a graphical sense, is that if the  
14      dollars that we pay per hectare here: Year one, two,  
15      three, four, five, and then six beginning -- this is  
16      period one and then into period two, that we usually  
17      find if we start here at some level, the Ministry's  
18      cost per year has been going something like this  
19      (indicating) - and not necessarily in a straight line -  
20      wind up here, and what we have been paying the  
21      company - so this is MNR actual on Crown lands, this is  
22      Crown management units - what we have been paying the  
23      company: We started here, there was an inflation  
24      factor and it is somewhere in here. So that we wind up  
25      with FMA payments there.



1                   So that what we have had historically, we  
2                   have received -- is we are normally winding up paying  
3                   our benchmark cost, Mr. Martel, as I would put it and  
4                   is usually a differential that is -- we are paying more  
5                   than them. Then we have agreed under the agreement  
6                   that that is our benchmark, so then we reset it.

7                   Now, in the second five-year - and none  
8                   of the second five-year periods have been completed -  
9                   that will tell the tail. But that is essentially and I  
10                  know it was confusing, but that is the process and the  
11                  way in which this was designed in the first place and  
12                  the way in which it operates.

13                  MR. MARTEL: In year six you would then  
14                  establish a new benchmark then; would you?

15                  THE WITNESS: It would be whatever the  
16                  Ministry's rate was then, which normally - and, as I  
17                  say, in the examples I am aware of - is higher. Now,  
18                  in your question about what the public -- what  
19                  information of this is available. Those rates are  
20                  public, they are in the agreement, okay.

21                  These rates are public, at what the new  
22                  ones are set because they are set in the agreement, a  
23                  public document and, in fact, the amounts in here that  
24                  are paid are in the five-year -- those are the total  
25                  and could be broken out, but that is the total that is

1 paid. ,

2 Does that clarify...

3 MR. MARTEL: Yes, it does.

4 MR. CASTRILLI: I will wait until you sit  
5 down.

6 MR. FREIDIN: Can we mark those as  
7 exhibits, Mr. Chairman?

8 THE CHAIRMAN: Exhibit 74, for the first  
9 one, I suppose. Why don't we put them both together  
10 and call it one exhibit.

11 Exhibit 74 will be the two sketches or  
12 charts, or whatever you want to you call them, prepared  
13 by Mr. Armson.

14 ---EXHIBIT NO. 74: Two hand-drawn sketches prepared  
15 by Mr. Armson.

16 MR. CASTRILLI: Q. Mr. Armson, for the  
17 \$64,000 question: What percentage of the benchmark is  
18 paid out by the Ministry for regeneration on each FMA  
19 in this province and where is that information publicly  
20 available?

21 A. I don't know the percentage of the  
22 total, the amount -- the total amount of money that is  
23 paid to FMA holders for silviculture is available.  
24 That is the only number that I know is generally  
25 available.

1 THE CHAIRMAN: But you do not have  
2 available the total amount of money spent on  
3 silviculture by both industry and the Ministry?

4 THE WITNESS: No. The industry  
5 component, as I indicated before, is not known, not to  
6 us.

7 THE CHAIRMAN: So the differential cannot  
8 be computed as a percentage.

9 THE WITNESS: No, the only differential  
10 is what we pay.

11 THE CHAIRMAN: I do not know if you are  
12 going to get much further with this, Mr. Castrilli.

13 MR. CASTRILLI: I am going to move on.

14 THE CHAIRMAN: Okay.

15 MR. CASTRILLI: Thank you.

16 Q. Mr. Armson, the other matter we dealt  
17 with before the luncheon break was the issue of the  
18 security of tenure and the company's historic fear of  
19 losing their licences. Do you recall that discussion?

20 A. No, it was their concern for  
21 security, not necessarily fear of losing licences.

22 Q. Well, security of tenure.

23 A. That's right, security was the word  
24 of relevance.

25 Q. Do you know of any company having

1 lost or had their licence revoked by their Ministry or  
2 its predecessors, I am speaking now of a company  
3 licence?

4 A. There have been changes in licences  
5 at the Minister's behest, yes.

6 Q. I said lost not changes.

7 A. Or areas removed from their licence,  
8 yes.

9 Q. Do you have a ballpark figure, what  
10 is the source for that statement?

11 A. My own personal knowledge when I was  
12 executive co-ordinator.

13 Q. And what period would that be?

14 A. That would be from 1983 to 1986.

15 Q. Now, are we talking about one changed  
16 area, or are we talking about a hundred changed areas?

17 A. No, a small number. There was one  
18 that I could particularly remember.

19 Q. Is there data published by the  
20 Ministry on licences lost or areas changed within a  
21 licence?

22 A. Not that I am aware of. There is  
23 information on licences, but I am not aware of public  
24 data on changes in areas as such.

25 THE CHAIRMAN: It would be available



1 insofar as, if you changed a licence, you would have to  
2 publish -- there would have to be a new licence  
3 containing the new area; would there not?

4 THE WITNESS: They are changed through  
5 the Order-in-Council process, therefore, they are  
6 tabled and posted in that sense but I take it that  
7 that --

8 THE CHAIRMAN: It is not tabulated  
9 anywhere?

10 THE WITNESS: There isn't a tabulation  
11 that is in a public document as such.

12 MR. CASTRILLI: Q. But I presume your  
13 testimony is that such data exists?

14 A. Yes.

15 Q. Is it available in an easy form?

16 A. I can't answer that. I think those  
17 that have the direct responsibility could say how  
18 difficult or otherwise it would be or what time would  
19 be involved.

20 Q. All right. Can you advise which  
21 panel will be dealing with this issue, if any?

22 A. I don't know that any panel is  
23 dealing with this issue, but counsel may --

24 THE CHAIRMAN: Mr. Freidin?

25 MR. FREIDIN: That is correct.

1 THE CHAIRMAN: No panel is dealing with  
2 this issue?

3 MR. FREIDIN: That is correct.

4 THE CHAIRMAN: Would the Ministry be able  
5 to indicate whether that information can be made  
6 available?

7 This witness says that he does not know  
8 whether it is difficult to ascertain or not, and you  
9 are not calling a panel, so could the Ministry inform  
10 the Board whether it could be made available, or not?

11 MR. FREIDIN: If the Board feels that  
12 information is relevant - I have some concerns as to  
13 whether it is - but if the Board feels it wants that  
14 information, we can make the necessary inquiries and  
15 advise the Board.

16 THE CHAIRMAN: We feel that that  
17 information is relevant, however, we would like to make  
18 it a useful time period. In other words, going back 25  
19 years may not be particularly relevant. Say, since  
20 1980.

21 MR. FREIDIN: We will make the inquiries  
22 and if, in fact it becomes an onerous task, and feel it  
23 isn't justified with the time and the expense of  
24 getting it, I will come back and so advise the Board  
25 and ask for instruction.

1 THE CHAIRMAN: Mr. Castrilli, would you  
2 consider that to be an appropriate time frame because  
3 we have evidence, I think, on the record that there was  
4 not vigilant enforcement, except more recently.

5 So I do not think it makes much sense  
6 going way back.

7 MR. CASTRILLI: I would be content with  
8 that, Mr. Chairman.

9 MR. FREIDIN: Could I, for the purposes  
10 of the record, ask that the exact information that is  
11 desired could be stated so that we can sort of go back  
12 and there won't be any confusion about what it is that  
13 you are looking for.

14 THE CHAIRMAN: Okay. Whether you can  
15 provide the Board with information concerning details  
16 with respect to licences that have been either revoked  
17 or areas changed within those licences and, I take it  
18 by changed, where areas have been deleted from those  
19 licences.

20 MR. FREIDIN: And is that for any reason?

21 THE CHAIRMAN: Well, would not this  
22 information, Mr. Armson also give the reason why.

23 THE WITNESS: The actual statistics on  
24 the change wouldn't. The change in licensing wouldn't  
25 in itself provide that.

1 THE CHAIRMAN: Would not indicate whether  
2 it is because of a failure to comply with the terms of  
3 the agreement.

4 THE WITNESS: Oh. Well, to my  
5 knowledge -- if we are talking about forest management  
6 agreement areas, any changes -- I don't believe there  
7 have been any significant changes on those areas.

8 When I was speaking of licences, I am  
9 talking about licences generally in the province, but  
10 in terms of forest management agreement areas, there  
11 may have been some minor adjustments, but I don't  
12 believe there have been any significant changes in  
13 those areas.

14 THE CHAIRMAN: Well...

15 MR. CASTRILLI: My original question was  
16 in relation to FMAs.

17 THE CHAIRMAN: Well, I mean, it is our  
18 understanding - correct us if we are wrong - that you  
19 have FMAs with respect to certain areas, most areas now  
20 in the province but, in addition, there are licences  
21 granted with respect to those FMA areas.

22 THE WITNESS: That's correct. And, Mr.  
23 Chairman, it is just that when the word licence is used  
24 I tend to use it in the sense of those areas other than  
25 FMAs, although the agreement stands in the stead of a



1       licence in terms of the legal aspects of cutting Crown  
2       timber.

3                   THE CHAIRMAN:   But it is the FMA  
4       agreements that have the conditions that are binding on  
5       the companies for which, if they do not observe them,  
6       they run the risk of losing their licence.

7                   Is that not correct?

8                   THE WITNESS:   That's right.   And if I  
9       might perhaps clarify it, there have been no changes in  
10      the areas of forest management agreements in relation  
11      to defaults or inability to fulfill the obligations.  
12      That is a very clear.

13                  THE CHAIRMAN:   Well, if that is the case  
14      then, I do not see the necessity of having to provide  
15      that other information we earlier requested.

16                  MR. CASTRILLI:   Thank you.   No, I agree.

17                  Q.   Mr. Armson, just for the record, can  
18      you advise the Board whether the terms of some of the  
19      older licences - using it now in the broader sense -  
20      say going back to the 1960s, were for longer than the  
21      21-year period you indicated?

22                  A.   I couldn't say offhand.   I don't  
23      recollect the details of any of those licences.

24                  Q.   So you wouldn't know whether some of  
25      them would have been for as much as a hundred years,

1 renewable every 20?

2 A. No, I would have to check the records  
3 on that one.

4 Q. Okay, fine. Thank you.

5 Now, the other matter we were dealing  
6 with before the break, I believe I had referred you to  
7 exhibit -- or we had been talking about the Ontario  
8 Economic Council Report and I referred you to page 13  
9 to that and I had read that into the record.

10 I won't do that again, but I believe I  
11 was at the point of asking you, with respect to the  
12 quote that I had read into the record, whether it would  
13 not be more reasonable to develop forest operating  
14 companies to ensure wood supply at the lowest possible  
15 cost commensurate with sound forestry practice?

16 A. And I believe my response then was:  
17 It might be in one particular instance but, in general,  
18 I didn't see that that was a solution to what was the  
19 perceived problem.

20 Q. I see. And do you recall - and can  
21 you confirm for me - that that was a proposal of  
22 Commissioner Kennedy?

23 A. I believe it was, yes.

24 Q. For the record, that would appear at  
25 Exhibit 62, beginning at page 188, and that will be at

1 the bottom of the page.

2 And there the Commissioner is talking  
3 about his proposal and says that:

4 "The duty of the forest operating  
5 companies would lie in delivering ample  
6 and suitable wood to domestic mills at  
7 the lowest possible cost commensurate  
8 with sound forestry practice. "

9 And that is the bottom of page 188 and at  
10 the top of page 189.

11 A. Yes. Yes, I see that.

12 Q. And you indicated that you thought  
13 that might be a good idea in one particular instance,  
14 but in general not?

15 A. That's correct.

16 Q. What is the one particular instance  
17 where it would be helpful?

18 A. Well, the one particular instance --  
19 I said in a particular instance, I didn't specify the  
20 nature, but I think that Major General Kennedy, in  
21 reading this, is quite clear he's talking about wood  
22 that flows down a water -- in effect, from a watershed  
23 and down the main, almost the rivers -- he is talking  
24 about driving wood and he, therefore, has taken it in  
25 the context of a well-defined topographic and watershed

1 area and I think that in that time that was perhaps a  
2 very very logical way to view.

3 It, but we don't move wood -- wood  
4 doesn't move in that way, areas are not defined by  
5 watersheds and, therefore, I think the position and the  
6 proposal he had, which had some merit then to a degree,  
7 is not as relevant now to our current situation.

8 Q. I see. So your testimony is that his  
9 proposal was appropriate, relevant and reasonable in  
10 1947 but is not appropriate, relevant or reasonable in  
11 1988; is that correct?

12 A. It had some logic to it then.

13 Q. Did it have any logic in 1979?

14 A. No, because by that time, in fact,  
15 the movement of wood and cross-movement of wood by  
16 road, by rail and in different forms, was already  
17 becoming a significant item.

18 Q. Do you have Exhibit 69 before you?

19 THE CHAIRMAN: What is that, Mr.  
20 Castrilli?

21 MR. CASTRILLI: That is the one page  
22 article by Mr. Armson dated February, 1979.

23 Q. Mr. Armson, isn't it in fact the case  
24 that you endorsed the Kennedy proposal in 1979--

25 A. Yes.



1 Q. --in the article that is now Exhibit  
2 64.

3 A. I said it was time to reconsider it.

4 Q. Let's read what you said:

5 "In 1947..."

6 This is a column to the next to last paragraph,

7 MR. MARTEL: I don't know where it is, I  
8 can't find it.

9 THE CHAIRMAN: We do not seem to have it.  
10 Oh, wait a minute, here we are. This one?

11 (Indicating)

12 MR. CASTRILLI: Yes, that's right.

13 Column two, the next to last paragraph:

14 "In 1947, the Kennedy Royal Commission  
15 recommended the establishment of the  
16 forest operating companies. His  
17 recommendation, although foreseen, was  
18 ignored. It is time I believe to  
19 reconsider the proposal in the light of  
20 our small but real accomplishments in  
21 forest management during the past decade,  
22 or so, the foreseeable end to the large  
23 simple exploitation and the necessity of  
24 rationalizing our forestry program if we  
25 are to sustain a viable industry in the

1 long-term."

2 It seems to me, Mr. Armson, that you  
3 endorsed that proposal as late as 1979. Why did you  
4 indicate just before to the contrary?

5 A. Well, for two reasons and I have no  
6 problem with recanting my words.

7 At that time there was no mechanism nor  
8 set of mechanisms whereby individual forest companies  
9 could in fact undertake the responsibility for forest  
10 management. I would note that this was in 1979, prior  
11 to the legislation being enacted that brought in forest  
12 management agreements.

13 And, secondly, the second reason was: At  
14 that time I was not as familiar as I have become and  
15 certainly I have become much more aware of it, with the  
16 flows of wood that go on across watershed boundaries  
17 and, in fact, in different forms. And I believe that  
18 that movement and the dynamics of wood movement have,  
19 in my opinion, together with the assumption of  
20 responsibilities by the forest management agreement  
21 holders, has changed by view on that subject.

22 Q. But just before when I asked you  
23 whether his proposal in 1947 was relevant to 1979, you  
24 said it was not; is that correct?

25 A. That's right, that is the benefit of

1       hindsight.

2                   Q.   Whose hindsight?

3                   A.   Mine.

4                   Q.   Let me suggest Mr. Armson, I do not  
5 understand from the testimony that I have heard from  
6 you this afternoon and this morning, why it appears  
7 that the Ministry of Natural Resources, through your  
8 testimony, Exhibit 53, is emphasizing to this Board the  
9 need for government to make long-term financial  
10 commitments to the industry when the industry should be  
11 fully capable of supporting itself.

12                   Do you want to perhaps put your position  
13 on the record with respect to that?

14                   A.   Yes. I believe I made this point  
15 before but I will make it again.

16                   It is my view and my opinion that the  
17 first responsibility for long-term commitments lies  
18 with the owner of the lands. It seems to me that is a  
19 natural principle and, therefore, the onus for  
20 financial commitment lies with the owner and, in this  
21 case, that means government representing the public.

22                   How the government or landowner wishes to  
23 deal with the way in which various activities that they  
24 want implemented is another matter.

25                   But that is what that sentence refers to

1 and why government is specifically identified.

2 THE CHAIRMAN: And why is that: Because  
3 they get -- the owner is entitled to the long-term  
4 residual benefit? Is that the other side of the  
5 principle?

6 THE WITNESS: That is a very clear part  
7 of that principle, yes, Mr. Chairman.

8 MR. CASTRILLI: Q. And you would agree  
9 with me that if the owner is the long-term residual  
10 beneficiary he should know what he is buying and the  
11 amount he is paying for it?

12 A. That is true.

13 Q. And would you agree with me that  
14 right now the public does not know either?

15 A. The public knows exactly what it is  
16 paying for, the forest management and timber management  
17 activity.

18 Q. It does not know the proportion  
19 though, does it? We just went through this for the  
20 last two hours.

21 A. I think I have already answered that  
22 one, I think, Mr. Chairman.

23 Q. And your answer is that they don't  
24 know?

25 A. They know what they are paying as



1 land--

2 Q. They do not know the proportion?

3 A. That is correct.

4 Q. Thank you. Now, in paragraph 52, Mr.  
5 Armson, of your evidence at page 34, you indicate the  
6 need for funding and the role of the 1972 Forest  
7 Production Policy in this regard.

8 And, if I understand your testimony  
9 correctly on this point, the Forest Production Policy  
10 provided direction for long-term timber production and  
11 the spending of public funds for the forests, including  
12 particularly regeneration.

13 Is that correct?

14 A. That's correct.

15 Q. And who is it refunding in that  
16 paragraph?

17 A. At the time of this we were funding  
18 the work to be undertaken by Ministry, or by  
19 individuals or companies contracted by the Ministry.

20 Q. And I understand that the Policy -  
21 and I presume including this aspect of it - will be  
22 dealt with in Panel 4?

23 A. That is correct.

24 Q. Paragraph 53, you refer to modified  
25 timber operations to accommodate other forest uses.

1                   What was the nature and amount of these  
2 modified timber operations that you are referring to  
3 there?

4                   A. Well, there were a number of them  
5 that I am personally familiar with. There was no  
6 documentation, Mr. Chairman, that I am aware of on a  
7 provincial scale. There were a number in this vicinity  
8 which involved various forms of strip clear-cutting  
9 adjacent to highways, they are still evident along some  
10 of the provincial highways.

11                   There was -- probably one of the better  
12 examples was a cutting that was done in the Skyline  
13 Reserve of the Temagami area along Lake Temagami which  
14 was done in, as I say, very specifically with the  
15 viewing and the concerns of cottagers and others on  
16 that lake.

17                   Those are two that I can just think of  
18 offhand, there are other ones.

19                   Q. Thank you. You refer in the last  
20 sentence to:

21                   "These activities were undertaken without  
22 any coherent provincial policies."

23                   I am just wondering, what policies,  
24 coherent or otherwise, were used over what areas?

25                   A. Well, these were undertakings that

1       were - and if you are referring to the examples I  
2       indicated here - these were ones that were carried out  
3       by the Ministry or by companies in consultation with  
4       the Ministry, certainly the two examples I referred to  
5       that way, where the unit forester for the Ministry in  
6       co-operation with company staff, foresters or  
7       otherwise, determined that that would be a form of  
8       harvesting and a design for harvesting that would do  
9       more than just provide timber; it would also satisfy  
10      some other concerns locally.

11               Q.   So I suppose you are really saying  
12      this was a local policy or a unit forest policy?

13               A.   I am not even suggesting it was a  
14      policy, I am suggesting that those responsible for  
15      management took some initiative and exercised some  
16      professional judgment.

17               Q.   Okay. Well, I am trying to  
18      understand your sentence. In paragraph 53 you say:

19                    "These activities were undertaken  
20                    without any coherent provincial  
21                    policies."

22               Can we simply say that there were no  
23      provincial policies?

24               A.   That's right.

25               Q.   Thank you. Paragraph 54. Now, you

1 note there that:

2 "By 1975 it was clear that government  
3 planning for regeneration and separate  
4 industry planning for harvesting was  
5 creating serious..." you call it,  
6 "...incongruities and inefficiencies in  
7 what should be a unified integrated  
8 planning process."

9 I am wondering, would you agree with me  
10 that it would be fair to say that what you mean by that  
11 first sentence in paragraph 54 is that industry logging  
12 practices were causing problems for the Ministry of  
13 Natural Resources' regeneration efforts?

14 A. Yes.

15 Q. Your answer is yes.

16 A. Yes.

17 Q. And can we assume that this is  
18 because of the way the industry was cutting timber,  
19 government regeneration success was falling below what  
20 had been anticipated or expected?

21 A. Not necessarily. In probably the  
22 major example that was made evident to me in 1975 and  
23 '76 was the lack of all-weather road access into areas  
24 that had been harvested in the winter and that rendered  
25 them difficult to reach in terms of site preparation



1 with vehicles and equipment or to be planted and that  
2 meant getting people and planting stock into the area.

3 That, I would say, was the key reason,  
4 rather than the actual mechanism of harvesting the tree  
5 per se. Although that was also -- there were  
6 associated factors there, and I believe I mentioned  
7 those, that where the harvesting was done and left  
8 slash in certain patterns or certain amounts associated  
9 with a particular logging system, that might, in fact,  
10 create greater cost or inefficiencies, if you want to  
11 put it that way, in subsequent regeneration.

12 Those were the two particular examples I  
13 had in mind.

14 Q. Well, would you agree with me or you  
15 appear to be saying - but let me confirm that you are  
16 in fact saying - that government regeneration efforts  
17 were unsatisfactory because of, in part, uncontrolled  
18 clear-cutting by industry?

19 A. No, I didn't say that.

20 Q. Well, I didn't suggest you were. Are  
21 you saying it had nothing to do with uncontrolled  
22 clear-cutting by industry?

23 A. In my judgment it had nothing to do  
24 with clear-cutting per se.

25 Q. Now, you note that all of this,

1       whatever it was, was clear by 1975.

2                       Wasn't it also clear much earlier than  
3       1975?

4                       A.   Yes, it was clear to people before  
5       that.

6                       Q.   It was clear to Brodie in 1967;  
7       wasn't it?

8                       A.   In '67, yes, he mentioned this.

9                       Q.   For the record, he mentioned it at  
10       pages 123 and 124 of the exhibit we have filed in these  
11       proceedings; did he not?

12                      A.   I believe he did.   Get my hands on  
13       that one.

14                      Q.   It is Exhibit 60.

15                      A.   Can you refer me to the page number?

16                      Q.   Sorry, pages 123 and page 124.

17       Essentially isn't that why Brodie recommended that  
18       forest management research tackle immediate,  
19       operational and silvicultural problems?

20                      A.   It was one of the aspects, yes.

21                      Q.   Thank you.   Isn't it also clear that  
22       cutting and regeneration efforts were unco-ordinated as  
23       early as the 1940s, and isn't that why in part  
24       Commissioner Kennedy recommended his proposal for  
25       forest operating companies?

1                   A. That may well be part of his reason.  
2                   I haven't suggested they were co-ordinated then.

3                   Q. Is there any difference to the forest  
4                   between unco-ordinated activity resulting in inadequate  
5                   regeneration and harvesting and silvicultural being  
6                   separated and the result being inadequate regeneration?

7                   A. In the use of the word co-ordinated,  
8                   I am referring to bringing together into the planning  
9                   process what I believe is a basic tenant in the  
10                  practice of forestry and; that is, harvesting and all  
11                  the related other subsequent practices.

12                  And, therefore, the unco-ordination is  
13                  when you separate the planning of those two groups or  
14                  set of activities.

15                  In themselves that doesn't necessarily  
16                  mean that you are going to get whatever regeneration  
17                  you are planning, because a plan is merely a plan, and  
18                  it has all the attributes of defining presumably and  
19                  should define objectives and how those objectives can  
20                  be reached, but the implementation is dependent on  
21                  other factors.

22                  Q. Would you agree with me, Mr. Armson,  
23                  that the bottom line in both cases is inadequate  
24                  regeneration, the bottom line concern?

25                  A. The bottom line concern was that

1       there was inadequate regeneration, that is correct, at  
2       that time.

3                   Q.   Thank you.   Would you agree with me  
4       that the problem from at least the 1940s on, if not  
5       much earlier, has been how to get a reluctant industry  
6       to systematically engage in effective regeneration  
7       efforts?

8                   A.   That has been a problem, yes.

9                   Q.   Didn't the Ontario Economic Council  
10      say as much in 1970?

11                  A.   They implied a solution, and I  
12      indicated that the words they used I didn't necessarily  
13      agree with.

14                  Q.   Let's look at some other of their  
15      words.   Page 12 of what would be Exhibit 73.   Do you  
16      have the page?

17                  A.   Yes, I do have that.

18                  Q.   Looking at the first paragraph,  
19      left-hand column:

20                        "Much of the forest land in Ontario which  
21                        is classed as sub-marginal agricultural  
22                        land suffers from the fact that the  
23                        lumbering process was considered for many  
24                        years a mining operation."

25                        Do you agree with that statement?



1 A. I think that's true, yes.

2 Q. The next paragraph:

3 "Timber was removed and there was little  
4 investment in the regeneration of a  
5 second crop. The land was without crop  
6 for many years, it was producing  
7 inferior species."

8 Do you agree with that?

9 A. Yes.

10 Q. There are other paragraphs on the  
11 page, I am not going to read the entire page into the  
12 record, but just for the purposes of our discussion  
13 here, Mr. Armson, would you agree with me that whether  
14 industry has had the actual responsibility for  
15 regeneration - which would, I guess in general, be the  
16 pre-1962 and post-1979 period - or whether government  
17 has had responsibility for it in the period inbetween  
18 1962-1969, the problem has always been how to get a  
19 reluctant industry to regenerate cutover areas?

20 A. I would suggest that the problem has  
21 been addressed to a very large degree by the present  
22 agreement arrangements.

23 Q. Well, let's just confine our comments  
24 then and your answer to the period up to 1979. Would  
25 you agree with that statement?

1 A. Yes. Prior to that, yes, that's  
2 true.

3 Q. Now, paragraph 54, you also note  
4 that:

5 "The separation of these functions,  
6 harvesting and regeneration, was  
7 resulting in problems for integration of  
8 the planning process..."

9 And you then go on to note that the  
10 Ministry's response was the negotiations of FMAs. You  
11 say:

12 "...under which some of the companies  
13 undertook responsibility for all aspects  
14 of timber management including  
15 regeneration in an integrated fashion."

16 My question is: What has been the  
17 additional impact of the FMAs on the integration of  
18 harvesting systems with silviculture since the 1979  
19 amendments?

20 A. Well, in the timber management  
21 planning process and its implementation has embraced  
22 both those key activities, both regeneration and  
23 harvesting.

24 Q. You say that some of the companies  
25 undertook this responsibility. Is there a particular

1 reason why you use that terminology?

2 A. Because not all companies are forest  
3 management agreement holders.

4 Q. Aren't we talking about only FMAs?

5 A. No, we are talking about the -- in  
6 that sense, I would clarify that, all the companies --  
7 the basic agreement is the same and all companies  
8 entering into it undertake the same obligations in  
9 terms of planning, harvesting and carrying out  
10 subsequent activities.

11 There are companies which do not have  
12 forest management agreements and they are the ones to  
13 which the word 'some' refers.

14 If I may, other than the 'some', it was  
15 those -- if you read the sentence, I am sorry, it  
16 should have been read: The companies that enter into  
17 FMAs undertook those obligations. There are some  
18 smaller number of companies that don't have those  
19 agreements and, therefore, they don't have the same  
20 obligations.

21 Q. Thank you. Would it be fair to say  
22 for those companies that have not entered into the FMA  
23 process these areas are being treated with the same  
24 methods the Ministry used before the FMAs?

25 A. The division is there, but my general

1 sense would be there is a closer working relationship,  
2 but the division is still there between the planning  
3 for harvesting, except on Crown management units where  
4 the planning is done by the Crown unit forester.

5 And I think I made that clear in my  
6 report even in 1967.

7 Q. Could you just advise me which panel  
8 will be dealing with the issue of shelterwood, special  
9 forms of clear-cutting and seed tree systems to obtain  
10 regeneration?

11 MR. FREIDIN: Panel 10.

12 MR. CASTRILLI: Not panel 10.

13 MR. FREIDIN: Oh, I'm sorry.

14 MR. CASTRILLI: Not Panel 10?

15 MR. FREIDIN: Panel 10 is based -- in  
16 other words with 11 which is renewal. We are talking  
17 about harvest and renewal. There is a linkage between  
18 the two, as you heard, and they will deal with both.

19 MR. CASTRILLI: Thank you. And we will  
20 be dealing, I presume, in those panels with the issue  
21 of the success rates of the various methods?

22 MR. FREIDIN: I don't think in a  
23 quantifiable form, but in terms of explaining why  
24 certain activities, harvest methods are engaged in,  
25 generally, what sorts of results can be expected, that



1 certainly will be dealt with.

2 MR. CASTRILLI: Any other panels?

3 MR. FREIDIN: When you ask that question,  
4 you are talking about the specific methods that were  
5 being used?

6 MR. CASTRILLI: Yes.

7 MR. FREIDIN: Those are the right panels.

8 MR. CASTRILLI: Okay. Thank you.

9 MR. FREIDIN: There will be some  
10 discussion provided by the -- in Panel No. 4 as well,  
11 the witness statement for that, where the success of  
12 certain treatments will be discussed.

13 MR. CASTRILLI: Thank you.

14 Q. Mr. Armson, can you - or maybe it Mr.  
15 would be Mr. Freidin again, but are we going to see  
16 statistics in either Panels 4, 10 or 11 that would help  
17 us all conclude that FMAs have in fact contributed to  
18 regeneration or to integration, as you put it, in  
19 paragraph 54?

20 MR. FREIDIN: I won't venture to guess  
21 whether in fact this information will satisfy you,  
22 Mr...

23 THE CHAIRMAN: Will there be anything --

24 MR. FREIDIN: But there will be evidence  
25 in terms of percentages on Crown land in relation to

1 some of these activities, the FMAs being that Panel 9  
2 as well. Just wait and agree with or criticize the  
3 statistics which are available at the time when we  
4 present that evidence.

5 THE CHAIRMAN: So there will be some  
6 information upon which he could decide whether or not  
7 it even attempts to satisfy him?

8 MR. FREIDIN: I wouldn't even agree to  
9 say that he would find information that he could make a  
10 decision on, but there will be information provided.

11 THE CHAIRMAN: Will there be enough  
12 information for us to make a decision on?

13 MR. FREIDIN: For some of us.

14 THE CHAIRMAN: Thank you.

15 MR. CASTRILLI: I will be waiting with  
16 bated breath for that.

17 Q. Mr. Armson, on June 8th - I forget  
18 what volume number that would be - but I believe you  
19 were talking about the FMA agreements and standards of  
20 accomplishment with respect to regeneration.

21 Do you recall that?

22 A. Yes, do I.

23 Q. What did you mean by accomplishment?

24 A. Standards of accomplishment are in  
25 the silvicultural prescriptions and relate to the

1 percentage, stocking - and I apologize to Mr. Martel  
2 for raising that word, because I believe there was some  
3 confusion - but, if you will just accept that it is a  
4 piece of technical jargon, there is a number and it is  
5 expressed as a percentage and it relates to an  
6 attribute we call stocking.

7 Q. And I believe in your testimony on  
8 June 8th you also indicated that if a company did not  
9 do the work and I think -- I believe you were there  
10 speaking of engaged in the regeneration efforts - it  
11 did not get the money under the agreement.

12 Do you recall that testimony?

13 A. Yes, I do.

14 Q. What did you mean by doing the work  
15 or not doing the work?

16 A. The payments are based on the  
17 submission of an invoice together with information  
18 showing where the work has been undertaken on a map  
19 identifying that. That's the basis for payment. It is  
20 then reviewed and approved by the designated Crown  
21 representative of the forest.

22 MR. CASTRILLI: Perhaps I can ask you  
23 whether in Panels 10 and 11 the Ministry will be  
24 advising the Board of regeneration success on a  
25 management unit-by-management unit basis?

1 MR. FREIDIN: We will not.

2 MR. CASTRILLI: Is that because there is  
3 no such information available, or is there a particular  
4 reason for that?

5 THE CHAIRMAN: Be patient.

6 MR. CASTRILLI: I am not sure who is  
7 going to give the answer, the witness or...

8 MR. FREIDIN: Can I take that under  
9 advisement, I want to make sure I give an answer that  
10 is not misleading.

11 MR. CASTRILLI. I presume Mr. Armson  
12 cannot answer that?

13 MR. FREIDIN: He can answer that.

14 THE WITNESS: I think at this stage I  
15 would like to satisfy myself as to what information is  
16 available, and I am not sure at this time.

17 MR. CASTRILLI: Thank you.

18 Q. Let me ask you this, Mr. Armson:  
19 What if the Ministry determines that the company's  
20 harvesting method is undermining regeneration success,  
21 does the company still get the money for planting the  
22 trees even if they don't survive?

23 A. Well, I would answer it this way:  
24 The prescriptions for harvesting are laid out in the  
25 ground rules jointly and agreed to by the Ministry and



1 the company; therefore, if a harvesting method is used  
2 which is unsatisfactory, it must have been one that we  
3 agreed to one up front and then subsequently had found  
4 that - if it did any damage, it would be considered  
5 something to be changed.

6 But the harvesting method is determined  
7 up front in the ground rules.

8 Q. Who determines the harvesting  
9 method?

10 A. As I pointed out, the ground rules  
11 are established jointly by the company foresters and  
12 the Ministry forester.

13 Q. So the --

14 THE CHAIRMAN: So the company is getting  
15 paid on the basis of having done the work, not  
16 necessarily on the success of that work?

17 THE WITNESS: That is correct, of the  
18 actual activities which are paid for, they are paid on  
19 the completion of the site preparation or planting.  
20 That is the basis.

21 MR. CASTRILLI: Q. Mr. Armson, would you  
22 agree with me that it is possible that the Ministry of  
23 Natural Resources may be paying companies not for  
24 regeneration success but simply for planting?

25 A. They are paying them for planting. I

1 would point out, however, there is a standard and, in  
2 fact, where the standard is not met over the defined  
3 period, the company has the responsibility to  
4 regenerate entirely at its own cost and that is part of  
5 the terms of the agreement.

6 Q. That is not quite the question I  
7 asked. I asked: Is it possible that the government is  
8 paying the companies for inadequate regeneration even  
9 if they are meeting planting/stocking standards?

10 A. I am not sure what you mean by  
11 inadequate regeneration.

12 Q. Absolute survival.

13 A. The survival would meet the defined  
14 standards and that is the measure of success or  
15 otherwise.

16 Q. The planting is simply how many are  
17 planted; is it not?

18 A. The payment in planting is for the  
19 number of trees and that is the basis. How many trees  
20 are planted per unit hectare and in what condition are  
21 specified in the ground rules, and for that there is a  
22 specified standard.

23 If those standards are met and if they  
24 are, then fine. If they are not met, if the trees do  
25 not survive, for example, and for a reason that is

1 other than weather or some mitigating circumstance like  
2 that which can happen - it happens to our people - then  
3 the company is required under the agreement to  
4 regenerate at its own cost.

5 THE CHAIRMAN: But that is because the  
6 company has not met the standard established?

7 THE WITNESS: Or because there has been a  
8 failure for which the company is held responsible, yes.

9 THE CHAIRMAN: So there is some, at  
10 least, attempt at defining culpability, so to speak.

11 THE WITNESS: Oh, I would say, Mr.  
12 Chairman, with respect I think it is pretty clear.

13 MR. CASTRILLI: Q. And this will be the  
14 subject of Panel 4?

15 A. FMAs, are not the subject of Panel 4.

16 MR. FREIDIN: We are going to work it  
17 into the evidence, I haven't exactly decided where, but  
18 there is no way we are going to get to the end of this  
19 thing without telling everybody about it.

20 I have no problem with doing that, but I  
21 just can't say exactly where would be the most  
22 convenient panel.

23 THE CHAIRMAN: What panel number are we  
24 up to, Mr. Freidin?

25 MR. FREIDIN: We are at two.

1 ---Discussion off the record

2 MR. FREIDIN: I am not sure which panel.

3 MR. CASTRILLI: Okay. Thank you. I  
4 won't go on about that.

5 Q. Mr. Armson, could you advise the  
6 Board, have other cutting methods increased relative to  
7 the pre-FMA situations?

8 I am thinking now, for example, of  
9 shelterwood versus clear-cut, and what statistics are  
10 available with respect to that?

11 A. Well, the statistics would be  
12 available. At the provincial level, would be in the  
13 statistical reports of the Ministry and the most recent  
14 being for '87, and there the major harvesting systems,  
15 clear-cutting and selection and shelterwood are  
16 identified in the aggregate for the province.

17 I don't recollect exactly what the change  
18 in numbers have been over the years. Certainly that  
19 could be...

20 Q. Would one be able to, by comparing  
21 the pre-1979 annual reports and the post-1979 reports,  
22 make a determination for themselves, or would the  
23 information be there to make that comparison?

24 A. Oh, the information would be there  
25 but, as I say, I don't know what a change in numbers



1 would particularly reflect. The cause and effect there  
2 would be something I would not look for in terms of  
3 pre- or post-FMA necessarily.

4 Q. Well, let me ask you: Were the FMAs  
5 designed in part to modify cutting methods?

6 A. No, they were designed to provide for  
7 the integration of harvesting and regeneration  
8 particularly, and to bring the planning processes  
9 together so that there was, in a contractual way with  
10 professional input, silvicultural prescriptions to meet  
11 the objectives of management which are satisfactory and  
12 approved by the Ministry.

13 Q. Now, this is another reference to  
14 testimony you gave on June 8th, and you will have to  
15 bear with me. I believe I took down at one point you  
16 were referring to accelerated growth efforts of  
17 existing stands.

18 Do you recall that testimony?

19 A. Yes, I believe I do.

20 Q. Mr. Armson, would you advise the  
21 Board how much of that is done?

22 A. In terms of acceleration, there is --  
23 by silvicultural treatments, there is very little done  
24 currently.

25 Q. Is this documented anywhere?

1           A. That would be documented, again, in  
2     the Ministry's statistical reports, and such  
3     silvicultural treatment as fertilization - I believe  
4     that would be one, and I referred to this - and  
5     cleaning would be the categories or titles that would  
6     be there, but you will find relatively little is done.

7           Q. I believe you are referring to, for  
8     example, Exhibit 29, that's the Statistics for 1987?

9           A. Yes, I can refer you to the page  
10    number in there, in that particular one.

11           I believe it would be page 19 of that  
12    exhibit, and it would be just down below the middle  
13    part of that page under the title of Tending, there is  
14    hand-cleaning, herbicide spray, thinning and  
15    improvement, pruning - that's more of a qualitative  
16    thing - but fertilization - I presume there should be a  
17    comma in there - drainage and you will see that very  
18    little is done.

19           Q. Sorry, and these headings under  
20    Tending are what you meant by accelerated growth  
21    efforts of existing stands?

22           A. Specifically, fertilization at the  
23    bottom would be one. That was with the one -- I  
24    believe in my evidence, Mr. Chairman, I referred to  
25    the -- what Scandinavia had done to accelerate growth.

1                   The major practice they used was  
2                   fertilization to both accelerate and extend the older  
3                   age classes, but thinning would be another one.

4                   Q.   I notice that accelerated  
5                   fertilization seems to be decreasing since 1983.  Is  
6                   there a reason for that?

7                   A.   I don't know whether -- I think the  
8                   difference between 87 and 9 in the scheme of things is  
9                   so minimal that is neither a decrease nor an increase;  
10                  both numbers are insignificant.

11                  Q.   So accelerated growth efforts are not  
12                  accelerating but declining, or staying the same?

13                  A.   No, I would refer, Mr. Castrilli, to  
14                  my initial remark.  They are small, they are  
15                  essentially insignificant, whether they are 80 or  
16                  whether they are 9 doesn't really matter.

17                  Q.   All right.  So it is an  
18                  insignificant - I wouldn't say topic - but it's an  
19                  insignificant impact?

20                  A.   That is correct.

21                  Q.   Thank you.  Now, Mr. Armson, in what  
22                  I believe is Document 20, your Exhibit 53 your 1976  
23                  Report --

24                  THE CHAIRMAN:  What was the page number,  
25                  Mr. Castrilli?

1 MR. CASTRILLI: We are going to be at  
2 page 177.

3 THE CHAIRMAN: Thank you.

4 MR. CASTRILLI: Q. You refer there to --  
5 or you propose actually a classification of productive  
6 forest lands into two categories.

7 One, those lands capable of maintaining  
8 the mean annual increment, which is known as the MAI;  
9 and, secondly, those lands capable of having the MAI  
10 increased through the practice of silviculture.

11 That is actually your recommendation 6.4.

12 A. That is correct.

13 Q. Has this been done?

14 A. In various ways there is considerable  
15 implementation of it, but not necessarily in exactly  
16 the terms put out in recommendation 6.4, and I could  
17 explain to the Board, if they wish, what I mean there.

18 In a number of areas, both on unit basis,  
19 but in certain areas on a regional basis, there has  
20 been a very concerted effort - and Mr. Freidin referred  
21 to the question of land inventories earlier and it is  
22 tied to this - to identify areas where, in terms of our  
23 knowledge of the soils and so on, the productivity is  
24 high or could be high for forest growth and, therefore,  
25 the degree of effort would be put into those lands that



1 would be of a different order of magnitude perhaps and  
2 of a different type than in lands that were considered  
3 less productive in terms of timber production and where  
4 the investment, if you will, or inputs would be of a  
5 different order of magnitude, a lesser magnitude.

6 Q. Has this been reported in the forest  
7 resource -- sorry, identified by Exhibit 56, it is the  
8 Forest Resources of Ontario, 1986?

9 A. No. Quantified, no.

10 Q. Is it reported or quantified  
11 anywhere?

12 A. Not in any of the generally available  
13 documents. These are -- it is in certain documents  
14 that are used at the working level within either region  
15 or within districts, there are maps. Primarily that  
16 information is in a map format.

17 Q. This would be at the management unit  
18 level?

19 A. Or region, could be at the region  
20 level. In one region it is essentially a regional set  
21 of information.

22 Q. Has this been done on a  
23 region-by-region basis, or where has it been done?

24 A. It has been done in the northern  
25 region, it has been done in the northeastern region and

1 certain aspects of that are being carried out in the  
2 northcentral and northwestern regions at this time.

3 Elements of it have been, I would say,  
4 developed; that is, some of the relationships between  
5 productivity and tree growth also developed in the  
6 Algonquin region.

7 But the regional map format is  
8 essentially in the northeastern and northern regions.

9 Q. When you say northern region, you  
10 mean the administrative...?

11 A. The administrative region, yes.

12 Q. So basically two regions?

13 A. Those are the two regions that have  
14 been involved in it for a longer period.

15 Q. Thank you. Page 175, Mr. Armson --

16 MR. CASTRILLI: Mr. Chairman, I wonder:  
17 I am about to embark on a fairly long area and I am  
18 wondering if this might not be an appropriate place to  
19 have the mid-afternoon break.

20 THE CHAIRMAN: Very well.

21 We will break for 20 minutes.

22 ---Upon recessing at 3:20 p.m.

23 ---Upon resuming at 3:45 p.m.

24 THE CHAIRMAN: Thank you, ladies and  
25 gentlemen. Be seated, please.

1                   Mr. Castrilli, do you have an indication  
2 of how long you think you might be so we can sort of  
3 schedule the afternoon?

4                   MR. CASTRILLI: Yes, Mr. Chairman. I  
5 would think that about an hour, at most.

6                   THE CHAIRMAN: Well now, Ms. Seaborn, how  
7 long do you think you might be?

8                   MR. SEABORN: I would think probably an  
9 hour and a half, something like that, it depends on the  
10 last area Mr. Castrilli is going to be covering. Maybe  
11 that will cut out a whole section and I won't be very  
12 long at all.

13                  THE CHAIRMAN: Okay. Well, take your  
14 time and we will see when you finish as to whether we  
15 will go on with Ms. Seaborn this afternoon. We will  
16 probably at least get her started.

17                  Tomorrow morning we are going to talk  
18 about the site visits and I suspect that might take a  
19 bit of time, but I would think that we can finish your  
20 presentation, for sure, tomorrow in any event.

21                  MS. SEABORN: I would like very much to  
22 try and finish tomorrow because of the week off next  
23 week.

24                  THE CHAIRMAN: Okay. Well, I think it  
25 would be better if we did this: If we go on with your

1 presentation, Mr. Castrilli; if possible, start with  
2 Ms. Seaborn's presentation and then tomorrow morning  
3 finish off her presentation so that she will finish for  
4 sure, and that probably only take up the first half  
5 hour to hour in the morning, at the outside.

6 MS. SEABORN: I would think that is  
7 realistic, Mr. Chairman.

8 THE CHAIRMAN: And then go into the  
9 discussion of the site visits, so that if anything gets  
10 hung up it will be that, not the cross-examination.

11 MR. FREIDIN: And then after the site  
12 visits, we will deal with re-examination?

13 THE CHAIRMAN: Yes, we should be able --

14 MR. FREIDIN: If we have time.

15 THE CHAIRMAN: We should be able to  
16 finish that, if we do have time. I do not believe  
17 there is going to be anybody else that is going to be  
18 cross-examining. Mr. Edwards, I think, was indicating  
19 that he was not going to be cross-examining.

20 Is that correct?

21 MS. SEABORN: I believe that is --

22 MR. CASTRILLI: I think that is true.

23 THE CHAIRMAN: Okay.

24 MR. FREIDIN: My sense of it is that even  
25 if we finish a little earlier that we wouldn't be



1 starting or expected to start Panel 3.

2 THE CHAIRMAN: No, I think that is  
3 probably unrealistic. If we finish early tomorrow and  
4 we finish the site visit discussion, we will just  
5 adjourn at that point until we re-commence after the  
6 next week.

7 Thank you, Mr. Castrilli.

8 MR. CASTRILLI: Thank you, Mr. Chairman.

9 Q. Mr. Armson, if I could just refer you  
10 back to Exhibit 73, that is the Ontario Economic  
11 Council Report.

12 A. Yes, I have that.

13 Q. Page 12, again. At the bottom of the  
14 first column, the authors of the report indicate that:

15 "Efficient forest management means..."

16 And they outline two areas. The second  
17 area they identify as being equally vital:

18 "...a responsibility for forest  
19 management is the regeneration of a  
20 second crop as good as or better than the  
21 first and its maintenance at maximum  
22 growth to maturity."

23 And in the beginning of the next  
24 paragraph they indicate:

25 "Unfortunately over the longer term

1 little has been done in these..."

2 And they are referring to both aspects, I  
3 have just referred to the second one:

4 "...by many of the operators both  
5 pulpwood and saw timber cutting on Crown  
6 licensed areas."

7 Would you agree with that assessment by  
8 the Economic Council, for the period they were talking  
9 about?

10 A. Yes.

11 Q. Thank you. Now, I had previously  
12 referred you to page 175 of your evidence. There is a  
13 table on that page that you produced respecting, among  
14 other things -- the second itemized matter under that  
15 table is deductions from total productive forest land  
16 and the areas that are outlined are for parks, park  
17 reserves, proposed wilderness areas, special wildlife  
18 areas and et cetera and the table is in acres -- or  
19 millions of acres.

20 And I was wondering, to properly convert  
21 acres to hectares, I understand one would divide ten --  
22 taking the number that is there, 10.4 million acres  
23 divide that by 2.47 acres per hectares to get to your  
24 figure for hectares?

25 A. That is correct.

1 Q. So that the figure on -- if I were to  
2 make a second column on that page and call it hectares,  
3 for the 10.4 million acres, if we were to convert that  
4 to hectares, we would have 4.2 million hectares.

5 A. I have a calculator. Why don't I  
6 just check it out here.

7 Q. Thank you. The first number 82.2, is  
8 that...

9 Q. No, the second matter.

10 A. 10.4.

11 Q. 10.4 only.

12 A. 4.2, correct.

13 Q. Thank you. Now, I am wondering if  
14 you could define the four terms that are listed for  
15 that particular sub-heading that you identified as  
16 deductions from the total productive forest land;  
17 parks, park reserves, proposed wilderness areas and  
18 special wildlife areas.

19 As I recollect the parks -- well, the  
20 parks were those that were defined as being in parks  
21 and that would be through Order-in-Council; they were  
22 provincial parks, in other words.

23 Park reserves were the areas, as I  
24 recollect, that were identified using that term as it  
25 was at that time, an area that -- well, the term has a

1 definition within the Ministry.

2 Similarly the areas, proposed wilderness  
3 areas and special, I presume they were in reference to  
4 areas as defined by the Ministry at that time, but I  
5 have no particular knowledge or I cannot give you the  
6 specific definitions of those terms.

7 Q. And the special wildlife areas?

8 A. Again, those were identified. If I  
9 might, Mr. Chairman, I have asked during the study if I  
10 could have a table of information of areas --  
11 productive forest land and then what would be the  
12 deductions and the staff at that time provided me with  
13 this data.

14 I accepted it merely as a statement  
15 because I thought it was useful to have those numbers,  
16 whatever the basis was from there.

17 Q. So if I understand your testimony,  
18 the Ministry gave you the lump sum of figure of 10.4  
19 million acres?

20 A. That is correct.

21 Q. I see. And you didn't ask for a  
22 breakdown?

23 A. No, I didn't. I accepted the  
24 tabulation as they gave it to me from the draft report.

25 Q. Did they indicate what the source of



1       that number was?

2                   A.   I can't speak to that.  They had  
3       presumably got it from Ministry data, but I honestly  
4       don't know.  I accepted the table from the draft report  
5       as it was.

6                   Q.   Thank you.  Could I refer you to  
7       Document 21 which is now Exhibit 56 in these  
8       proceedings, it is the Forest Resources of Ontario for  
9       1986.

10                  A.   Yes.

11                  Q.   Page 20.  Mr. Armson, you will see on  
12       that page, it is identified as Table 3.

13                  A.   Yes, I have that.

14                  Q.   Area of the productive forests of by  
15       ownership.

16                  A.   Yes.

17                  Q.   And this document refers to -- or  
18       records what it describes as recreation reserves and  
19       provincial park areas and this figure is in hectares.

20                         And would you agree with me that if we  
21       did the math adding the total area, which is on the  
22       right-hand side of the page, for recreation, reserves  
23       and provincial parks, we would get approximately 1.4  
24       million hectares?

25                  A.   I believe that would be the order of

1 magnitude, yes, without calculating. It would be  
2 something of that order.

3 Q. Thank you. Could you advise the  
4 Board of your understanding of the definition of  
5 recreation reserves as used in this table?

6 A. I cannot give them the specific  
7 definition, at this time it isn't -- I don't have it up  
8 here in my head.

9 It is a definition that is used in the  
10 forest resources inventory and I would suggest that in  
11 that panel, that they can define that.

12 Q. Sorry, that would be panel...?

13 A. 3.

14 Q. Panel 3. Okay, thank you.

15 And would you agree with me that your  
16 report, particularly at page 175, indicates that a 4.2  
17 million hectare deduction is the appropriate figure for  
18 the four areas that are set out on page 175, while  
19 Document 21 at page 20 indicates only 1.4 million  
20 hectares of productive forest land is in recreation,  
21 reserves and provincial parks?

22 A. There is that discrepancy. I am not  
23 certain that the difference -- what meaning the  
24 difference has. The draft document that I used in 1976  
25 related to the Forest Production Policy, and although I

1 cannot be certain, I believe that the numbers in here  
2 were a reflection of the projection forward, areas  
3 forward to the year 2020, but that can be verified in  
4 the subsequent panel.

5 Q. Okay. Do you have any idea why there  
6 is such a discrepancy of 2.6 million hectares?

7 Sorry is that the right - 2.8 million  
8 hectares?

9 A. Well, the figure that is in the 1986  
10 report is, to the best of my understanding, an actual  
11 number, that relates to what exists at the time that  
12 these data were put forward.

13 As I indicated in the statement in the  
14 sentence immediately above the table on page 175, it is  
15 an approximation in this table on page 175 and to the  
16 degree that I -- in recollection, there may well have  
17 been an element of estimation for what would be  
18 involved over that period or to which the Forest  
19 Production Policy applied, but I cannot be sure about  
20 that.

21 Q. Mr. Armson, would you be able to  
22 advise the Board whether you know if your report, which  
23 reported on this land base, could have contributed to a  
24 public misunderstanding as to whether there was a  
25 possible timber shortage in Ontario, or the reverse

1 side of that; whether there was an overabundance of  
2 park and reserve land?

3 A. I have no idea what the public took  
4 from my report. They never informed me of their  
5 opinions.

6 Q. What about the government?

7 A. On this matter there was no -- I was  
8 not informed as to their response directly.

9 Q. Well, do you know who would have used  
10 your information?

11 A. Well, I mean, it was a public  
12 document. Whoever used the information in the report,  
13 I have no tally of those people.

14 Q. Have you ever seen your figures used  
15 in another document?

16 A. Not to my -- pardon me, not to my  
17 recollection - excuse me - not to my recollection.  
18 Over the 12 years span of time I may have seen them,  
19 but I honestly can't recollect them.

20 Q. Thank you. Are you aware of any  
21 proposals by the forest products industry in the late  
22 1970s, partially in response to your 1976 report, in  
23 which the industry suggested the formation of a forest  
24 management group?

25 A. Yes, I am aware of that document.



1 Q. Do you want a moment to recover.

2 A. Not if I can get this frog out of my  
3 throat.

4 Q. Do you have a copy of this?

5 A. I believe I have. I think I have.

6 Is that it?

7 Q. Yes.

8 A. That is number what?

9 MR. CASTRILLI: Mr. Chairman, Mr. Armson  
10 has indicated that he is familiar with the document I  
11 am about to file entitled: Forest Management in  
12 Ontario, and my understanding is that it is dated  
13 March, 1977.

14 I would like to make that the next  
15 exhibit. (handed)

16 THE CHAIRMAN: Thank you. We are up to  
17 Exhibit 75.

18 What do we call jthis document other than  
19 Forest Management in Ontario.

20 MR. CASTRILLI: Mr. Chairman, I have  
21 showed a copy of this document to my friend Mr. Cosman  
22 last week or the week before perhaps to confirm that it  
23 was indeed a document of his association. It is dated,  
24 although not on this particular copy, it is dated  
25 March, 1977.

1 THE CHAIRMAN: So it would be an OFIA...?

2 MR. CASTRILLI: Brief.

3 THE CHAIRMAN: ...brief.

4 ---EXHIBIT NO. 75: OFIA Brief dated March, 1977.

5 MR. CASTRILLI: Q. Mr. Armson, you have  
6 indicated familiarity with Exhibit 75 and you  
7 indicated, and you are aware of the proposal contained  
8 in it respecting the formation of a forest management  
9 group which, as I understand it, would have been  
10 proposed of industry and Ministry of Natural Resources  
11 staff to oversee the allocation of funds for  
12 silviculture, particularly regeneration.

13 Is that your testimony?

14 A. Yes, it was also to develop, if you  
15 like, a system related to that. That was one of the  
16 elements in it, as well as the item you mentioned.

17 Q. And as part of the proposal I was  
18 referring to, the companies were going to contribute  
19 funds to the group in lieu of paying stumpage and my  
20 understanding is that the level of government in  
21 industry funding was to become equal.

22 Are you aware of that proposal?

23 A. That I believe was the essence of the  
24 proposal, yes.

25 Q. And the essence of that proposal is

1 in fact referred to at the bottom of page 17 of Exhibit  
2 75 and on most of page 18; is that correct?

3 A. Yes. I believe -- I don't see it at  
4 the bottom of page 17.

5 Q. They refer there to the formation of  
6 such a group and then on page 18 the proposal appears.

7 A. Yes, the proposal is on page 18.

8 Q. Thank you. Can you advise the Board  
9 whether the Ministry of Natural Resources considered  
10 this or any other plan to have the industry participate  
11 in the funding of silvicultural programs?

12 A. No, I was not with the Ministry at  
13 that time. The Minister of the day and his staff  
14 presumably considered it, and it was subsequent to this  
15 that I was invited to take part in negotiations later  
16 in that year.

17 So, presumably, they considered it and  
18 decided upon a course of action, other than this.

19 Q. Thank you. You don't know the  
20 reasons?

21 A. No, I wasn't party to that.

22 Q. Will there be anyone giving testimony  
23 for the Ministry during the course of this hearing who  
24 would know.

25 MR. FREIDIN: I don't believe so. We are

1 not leading evidence on that. Whether one of the  
2 witnesses may be aware of that, I don't know.

3 MR. CASTRILLI: Okay, that is fine, Mr.  
4 Chairman.

5 THE CHAIRMAN: I suppose you have the  
6 option of asking every witness that appears.

7 MR. CASTRILLI: I suppose there are more  
8 efficient ways of doing it, too.

9 THE CHAIRMAN: Probably.

10 MR. CASTRILLI: All right, thank you.

11 Q. Page 180 of your evidence. The  
12 recommendation that appears at the bottom of that page  
13 is a recommendation by you to have the Ministry  
14 identify significant areas in need of forest management  
15 primarily for aesthetic, recreational and other  
16 non-consumptive uses.

17 A. Yes, I see that.

18 Q. All right. Has the Ministry -- or  
19 what steps has the Ministry taken, if any, to meet that  
20 recommendation, to your knowledge?

21 A. Well, I would suggest that within the  
22 present management planning process there is the  
23 requirement to identify what are termed areas of  
24 concern related to non-timber values. That is one  
25 aspect.



1                   But prior to that, when I was in the  
2                   position of Chief Forester, I was party to a committee  
3                   formed, actually by the Parks Branch, to in fact  
4                   establish criteria or - I hate to use the word with the  
5                   Board guidelines again - but to establish some relevant  
6                   basis for vegetation management that was specifically  
7                   in parks.

8                   So that is another aspect of it and I was  
9                   a member of that committee.

10                  Beyond that, I would suggest that my  
11                  first suggestion the areas of concern of timber  
12                  management planning processes, are probably the key  
13                  ones. They don't deal very directedly with the words  
14                  of the recommendation, perhaps quite that way, but they  
15                  relate to it very indirectly.

16                  Q. Can you advise the Board when the  
17                  concept areas of concern was first developed by the  
18                  Ministry?

19                  A. I think it would be -- it was  
20                  following our use of the term modified management areas  
21                  or the MMAs as have been referred to and I believe that  
22                  would go back, I don't know, about two and a half years  
23                  something like, that maybe three years.

24                  Q. So approximately 1985?

25                  A. Somewhere in about there, yes. I

1 cannot be sure of that, Mr. Chairman, but we could  
2 certainly inform the Board of that.

3 THE CHAIRMAN: Is the exact date  
4 relevant, Mr. Castrilli?

5 MR. CASTRILLI: No, no.

6 Q. Actually I am more interested in  
7 whether this proposal, which appears at page 180,  
8 became the Ministry's response to your recommendation  
9 in the form of areas of concern?

10 A. It would be my opinion that the  
11 response of the Ministry with areas of concern and  
12 indeed modified management areas wasn't directly tied  
13 back to this recommendation.

14 I think many of the people who were  
15 involved in the more recent years probably were either  
16 not knowledgeable or had forgotten what was in this  
17 particular report of now some 12 years back.

18 Q. Well, let me again just simply ask  
19 the question this way: At page 181 of your evidence  
20 recommendation 6.8 is a recommendation that:

21 "Division of Forests be funded to hire  
22 the necessary professional foresters and  
23 staff to undertake such forest management  
24 as is suggested in the recommendation 6.7  
25 and that the staff be attached to a

1 particular district"

2 And I am wondering: Has the Ministry  
3 followed through on recommendation 6.8?

4 A. No.

5 Q. And so they really have not followed  
6 through on the 6.7 either; is that correct?

7 A. Well, as I said only in a very  
8 indirect and I don't think there is a very direct  
9 linkage there.

10 Q. Thank you. Paragraph 55 of your  
11 evidence. You are referring there to the issue of  
12 public involvement in the development of timber  
13 management plans for each FMA area.

14 And can you just advise the Board what  
15 you mean by: "public involvement" in the context of  
16 paragraph 55?

17 A. In the context of paragraph 55 there  
18 is a public notice, series of advertisements in the  
19 various appropriate locations and media, I believe of  
20 the area and there is, I believe what is often referred  
21 to as an open house or a public information session  
22 that is available to people to give them information  
23 about the proposed forest management agreement area.

24 There is, if I may, Mr. Chairman,  
25 documentation on this for FMA areas and that could be

1 provided to Mr. Castrilli.

2 THE CHAIRMAN: Documentation relating to  
3 what kind of public involvement and how it should take  
4 place?

5 THE WITNESS: No, documentation for  
6 existing -- for ones which have been developed and to  
7 give him the information about...

8 THE CHAIRMAN: What steps had been taken?

9 THE WITNESS: What steps had been taken  
10 on an actual situation.

11 MR. CASTRILLI: Oh, actually, since my  
12 next questions were going to be that, I would  
13 appreciate that information.

14 THE WITNESS: Yes, we can provide that,  
15 Mr. Castrilli.

16 MR. CASTRILLI: Q. And could you advise  
17 the Board whether the information you will be providing  
18 to me would show where a draft FMA was subsequently  
19 changed by public participation before it became a  
20 final FMA?

21 Do you know if the information you will  
22 be providing would provide that type of information?

23 A. The particular paper material that I  
24 have seen as evidence of this doesn't, I believe, but I  
25 would have to verify that.



1                   I am not sure if there have been changes  
2           in proposed ones or not, I would have to -- it would  
3           deal with each specific one and -- am I correct in  
4           interpreting your question as whether any of them have  
5           had any changes or whether -- and would that be an  
6           example?

7                   Q.   I would be interested only in those  
8           that would have had changes as a direct result to  
9           submissions made during the course of the public  
10          participation program?

11                  A.   We will undertake to see if that  
12          information is available. I presume it is.

13                  Q.   That is fine, thank you.

14                  Paragraphs 57 through 59 of your  
15          evidence.

16                  A.   Yes?

17                  Q.   At the bottom of page 35, top of page  
18          36.

19                  MR. FREIDIN: I was just wondering  
20          before you answer that question. I didn't get down the  
21          discussion, so that I know now exactly what the  
22          undertaking is and to avoid there being a probably  
23          until once we get the transcript, could I perhaps get a  
24          clear indication of what the undertaking is understood  
25          to be?

1 THE CHAIRMAN: As I understand it, the  
2 undertaking is to provide information on what steps  
3 have been taken on existing FMAs with respect to public  
4 participation, what form that public participation  
5 took.

6 THE WITNESS: For changes in the area,  
7 Mr. Chairman.

8 THE CHAIRMAN: That is the second one, I  
9 thought you were going to provide --

10 MR. CASTRILLI: There are two  
11 undertakings.

12 THE CHAIRMAN: I thought you were going  
13 to provide the first one on looking back on existing  
14 FMAs and indicate what steps, relating to public  
15 participation, had in fact been taken with relation to  
16 those existing FMAs; that was one.

17 THE WITNESS: That's correct, yes.

18 THE CHAIRMAN: The second one was to look  
19 and see if any changes in the finalized or signed FMAs  
20 resulted from what was proposed as a result of public  
21 participation.

22 MR. FREIDIN: So the undertaking is in  
23 relation to the creation of forest management  
24 agreements -- public involvement in the creation of  
25 forest management agreements, not public involvement in

1 terms of timber management plans of forest management  
2 agreements.

3 THE CHAIRMAN: We are talking FMAs.

4 MR. CASTRILLI: FMAs.

5 THE CHAIRMAN: FMAs only. Is that...

6 THE WITNESS: Yes, I am clear.

7 MR. CASTRILLI: Thank you.

8 Q. Mr. Armson, we were referring to  
9 paragraphs 57 through 59.

10 A. Yes.

11 Q. And you refer there generally to the  
12 impact the computers have had on Ministry of Natural  
13 Resources information gathering, management and  
14 reporting responsibilities. Is that a fair summary of  
15 those 3 paragraphs?

16 A. Yes, that is.

17 Q. Would it be fair to say that the  
18 essence of paragraphs 57 through 59 is that there is  
19 more Ministry of Natural Resources information  
20 available today as a result of the computer age?

21 A. No, it is that the assembly and  
22 aggregation of data and, particularly the use of data  
23 in management and management planning, can be done  
24 quite differently using computers than it was  
25 previously when it was on papers and kept in ledgers.

1 Q. You are not saying that there is more  
2 information; you are saying there is better  
3 information?

4 A. No, I didn't say anything about the  
5 quality. I said that the manipulation of the data  
6 became much easier when it was done via the computer  
7 than when it was done on hard copy and by ledgers.

8 Q. Perhaps I could refer you to a prior  
9 exhibit, Exhibit 70, the Forest Resources of Ontario,  
10 1963.

11 A. Yes.

12 THE CHAIRMAN: What number?

13 MR. CASTRILLI: It is Exhibit 70. The  
14 short form is FRO '63. Yes, I believe that is it.

15 Q. Would you agree with me, Mr. Armson,  
16 that Exhibit 70 was produced along with separate  
17 district reports providing detailed information, or  
18 more detailed information?

19 I refer you, for example, to pages 27 and  
20 23 -- excuse me, 27 and 33.

21 A. In some respects it was more  
22 detailed; in other respects it was not as detailed.

23 Q. Let's just confirm. first of all,  
24 that on page 27, there is a reference there to:

25 "More detailed information on each



1 individual district as contained in the  
2 following forest resource inventory  
3 reports."

4 And report No. 17 to 22 are referred to.

5 Do you see that?

6 A. Yes, I see that.

7 Q. And similarly, if we turn to page 33  
8 of Exhibit 70, there we are referring to the  
9 exploitable forest area. You will see in the second  
10 paragraph, an indication that:

11 "More detailed information on each  
12 individual district is contained in the  
13 16 reports..."

14 Which I presume are developed on a  
15 district basis; is that correct?

16 A. Yes, that's what it states.

17 Q. Can you advise the Board where in  
18 Exhibit 56, the Forest Resources of Ontario 1986, there  
19 is any reference to separate or companion district  
20 reports providing more detailed information?

21 A. There is not because, as I believe  
22 will be presented in evidence in Panel 3, those reports  
23 are on a management unit basis.

24 Q. Can you confirm for me that -- sorry,  
25 before I move on, let me move backwards. What is

1 produced on a management unit basis?

2 A. The forest resources information that  
3 is basic to that.

4 THE CHAIRMAN: Mr. Castrilli, I am  
5 missing your point. What is the point?

6 MR. CASTRILLI: Well, the witness in  
7 paragraphs 55 through -- 57 through 59 is talking about  
8 the impact computerization has had on the Ministry, and  
9 I am just taking him through two documents; one of  
10 which I presume is pre the computer era and the other  
11 is post the computer era, and I am doing some  
12 comparisons of what's in the documents.

13 THE CHAIRMAN: Well, yes, but that may  
14 indicate something with respect to two documents but,  
15 as I understood your comments, Mr. Armson, you are  
16 talking in general terms; you are saying since the  
17 introduction of the computer era the manipulation of  
18 information is not necessarily better, but it's made  
19 easier.

20 THE WITNESS: Well, and further to that,  
21 Mr. Chairman, the number of persons involved in the  
22 compilation and so on is, by a major order of  
23 magnitude, much less now than it was then.

24 MR. CASTRILLI: Forgive me if I am not  
25 understanding this, but certainly the impression I was

1 left with in reading paragraphs 57 through 59 is that  
2 the Ministry has more and can do more -- has more  
3 information and can do more with it as a result of the  
4 age of computers.

5 I don't believe Exhibit 70, which is a  
6 1963 document, was done during the computer era. I  
7 believe the 1986 document was, and I think it is  
8 relevant to know why, if in 1963 we had certain types  
9 of information, we do not see such information any  
10 longer in 1986?

11 THE CHAIRMAN: Okay. I guess where I am  
12 having my difficulty is, is I think you could almost  
13 take judicial notice of the fact that in the computer  
14 era you could produce more data and more information  
15 and probably do it one heck of a lot faster than you  
16 could do it in a previous area.

17 Whether you do that or not, is another  
18 question. I mean, looking at a document in a  
19 pre-computer era and saying it has got more information  
20 than one in the post-computer era, I do not think means  
21 a lot in that case.

22 But surely, I think it is recognized by  
23 most people, that in a computer era you have the  
24 capability of producing more data faster than you could  
25 previously.

1                   Would you not sort of agree with that  
2                   general proposition?

3                   MR. CASTRILLI: I agree with it, I  
4                   believe that's the essence of Mr. Armson's testimony.  
5                   My cross-examination, however, is going to the question  
6                   of why --

7                   THE CHAIRMAN: Why in these two cases is  
8                   that proposition not borne out. Would that be the  
9                   essence of your question?

10                  MR. CASTRILLI: Yes, that's correct.

11                  THE CHAIRMAN: Okay.

12                  MR. CASTRILLI: I believe the easiest way  
13                  to do it is to take the witness through several  
14                  companion parts of the reports, but I am content to  
15                  simply ask the question baldly, if you would prefer it  
16                  that way.

17                  THE CHAIRMAN: Well, can you answer that  
18                  question in that fashion, or do you want to be led  
19                  through both reports?

20                  THE WITNESS: Well, in the interest of  
21                  remedy, Mr. Chairman, I would prefer the --

22                  MR. CASTRILLI: To be fair, it would only  
23                  be a couple of examples.

24                  THE CHAIRMAN: Okay. Go ahead, we will  
25                  not interfere with your presentation.



1 MR. CASTRILLI: Thank you.

2 Q. Can you confirm for me that in  
3 Exhibit 70 there is also contained information on the  
4 annual allowable cut by area and volume? That's page  
5 23.

6 A. That is correct.

7 Q. Could you advise the Board where in  
8 Exhibit 56 there is reference to information on the  
9 annual allowable cut by area and volume?

10 A. It is not there.

11 Q. Could you advise the Board why it is  
12 not there?

13 A. Because it is an irrelevant item on  
14 that report.

15 Q. Why is it relevant in 1963 and not  
16 relevant in 1986?

17 A. Presumably the people at that time  
18 thought it was of interest and relevance.

19 Q. Haven't we had previous discussion  
20 during the course of today about concerns by various,  
21 shall we say, reviewers of difficulties in MNR  
22 information respecting area and volume, and the need  
23 for more such information, not less?

24 Isn't that the burden of Woodbridge Reed  
25 and isn't that the burden of Baskerville?

1           A. But I would submit that the  
2 provincial number in the 1963 document of allowable cut  
3 has little relevance since it doesn't specify where nor  
4 in relation to what demands, and I would suggest that  
5 the reason for omitting it from the overall provincial  
6 report is that the allowable cut - or as we call it  
7 now - the maximum allowable depletion is relevant at  
8 the management unit level, particularly, and not at the  
9 provincial level.

10           Q. So we would expect to see better  
11 information at the management unit level than the  
12 provincial level; is that correct?

13           A. Since - now, as compared with 1963?

14           Q. Yes.

15           A. Very definitely.

16           Q. And where would we see that better  
17 information?

18           A. In the timber management plan.

19           Q. Your testimony is: It is not  
20 necessary to see it in the forest resource inventory;  
21 is that correct?

22           A. In my opinion, it is an irrelevant  
23 number.

24           Q. That's fine. Can you confirm for me  
25 that Exhibit 56 also contains -- excuse me, Exhibit 70

1       also contains information by way of a breakdown by  
2       working group, size, class and maturity class of trees,  
3       for example, page 63?

4               Actually, it is throughout the report,  
5       but one example is at page 63.

6               A.   This is Table 36; is that correct?

7               Q.   Yes, that's correct.

8               A.   Yes, there is a breakdown by  
9       maturity, class and density class, and diametres.

10              Q.   Could you advise the Board where in  
11       Exhibit 56 there is comparable identification of such  
12       information of this type?

13              A.   There is not comparable information.  
14       The methodology used to gather the data for the report  
15       of 1986 is different from that used in the period to  
16       produce the 1963 document.

17              Q.   Sorry, you say it is not there, but  
18       it is better. I wasn't sure I understood the answer.

19              A.   No. I said it is not there and one  
20       of the factors is that the methodology used to provide  
21       the information for this document was different from  
22       that which was used to provide it for this and, in  
23       fact, has been in use for several decades, two decades  
24       perhaps.

25              Q.   Well, let me ask you: Are you saying

1       that the information that's contained in Exhibit 70  
2       that I just referred to is not relevant in 1987 - what  
3       year is it - 1988?

4                   A.   In the 1963 document?

5                   Q.   Yes.  The information that's in the  
6       1963 document that I have just referred you to, for  
7       example page 63, are you saying that it is not relevant  
8       for the public to have that information in 1988 or have  
9       it reflected, more particularly, in Exhibit 56?

10                  A.   In my opinion, at the provincial  
11       level, yes, this information is largely irrelevant.

12                  Q.   That information is irrelevant as  
13       well?

14                  A.   It is -- well, if I might, we have  
15       changed -- the nature of the information has been  
16       changed in recognition of the purposes for which the  
17       inventory is carried out.

18                  Q.   So that we would not even see such  
19       information in the timber management plans?

20                  A.   You might see more detailed  
21       information.  That would vary, I think, with plan to  
22       plan and I can't speak to the details of the plans.  I  
23       believe those will be dealt with in a later panel.

24                  Q.   That's commencing Panel 15?

25                  MR. FREIDIN:  I didn't hear the question.



1 MR. CASTRILLI: I am sorry, where would  
2 we see such information?

3 MR. FREIDIN: What information? I am  
4 sorry, I was speaking to Mr. Kerry and I missed the  
5 question.

6 THE CHAIRMAN: The type of information  
7 that is contained in, for example page 63 of Exhibit  
8 70. Mr. Armson indicated that some of that information  
9 might be found in certain management plans, timber  
10 management plans, but he did not know specifically  
11 which ones.

12 The question was: Where would that be  
13 addressed, in which panel, if at all?

14 MR. FREIDIN: It will be in 15.

15 THE CHAIRMAN: If at all?

16 MR. FREIDIN: Panel 15 will deal with  
17 timber management plans and there are sections of the  
18 timber management plan which describe the forests of  
19 the management unit in question.

20 So, some information will be provided in  
21 relation to the subject matters to the species. It is  
22 not broken down, necessarily in this form, but there is  
23 information in terms of the make-up of the forests in  
24 that unit.

25 THE CHAIRMAN: That's fine.

1 MR. FREIDIN: It is part of the  
2 management...

3 MR. CASTRILLI: That's fine, I can wait  
4 until Panel 15 for that one.

5 Q. Mr. Armson, paragraph 60.

6 A. Yes.

7 Q. You refer there to the new  
8 management -- excuse me, the new Timber Management  
9 Planning Manual which came into force in January of  
10 '86. And I believe you have previously advised that  
11 there have been several revisions to the manual since  
12 January of '86; they are, I think, known as the blue  
13 pages?

14 A. I believe -- yes, there have been  
15 some revisions. I have the...

16 Q. Yes. And I understand that the most  
17 recent set of revisions would go to February, 1988?

18 A. That could be. I can't be certain of  
19 the date on which the last revision was made.

20 Q. Well, would you agree that -- the  
21 problem I am having with paragraph 60, is paragraph 60  
22 doesn't tell me - doesn't tell anyone - that in fact  
23 the manual is meant to be updated; isn't that correct,  
24 but that is in fact what --

25 A. What I would anticipate in any area

1 of, particularly of direction in which there is large  
2 professional input, this would be updated. And I take  
3 that as a normal process.

4 Q. Right. I am trying to understand the  
5 process of updating as it applies to the subject of an  
6 Environmental Assessment Act approval.

7 I wouldn't want to hesitate to -- I am  
8 not certain exactly what was filed as Exhibit 7, but I  
9 presume it was the Timber Management Planning Manual  
10 plus an update, and the update may or may not have been  
11 to February of '88; it may have been to April of '87.

12 MR. FREIDIN: This very question came up  
13 before and we indicated that the manual and the  
14 amendments took the manual up to a specific date. I  
15 don't recall whether it was the...

16 MR. CASTRILLI: I have two updates; one  
17 is --

18 MR. FREIDIN: February the 15, 1988 was  
19 the last amendment to the manual. I think the evidence  
20 is that there have been no amendments to the manual  
21 since that date. The evidence was that the manual  
22 would be amended in order to conform to any terms or  
23 conditions that had to be met.

24 MRS. KOVEN: I have 41 amendments, Mr.  
25 Castrilli--

1 MR. CASTRILLI: You have 41 amendments.

2 MRS. KOVEN: --from April 30th, '87 to  
3 February 15th, '88.

4 MR. CASTRILLI: Yes, that's right.  
5 Well, I have an earlier set as well which only go to  
6 24; April 30, '87. I have got two sets, in other  
7 words.

8 MR. FREIDIN: All right. I guess throw  
9 away the one that only goes -- that doesn't go up to  
10 41.

11 MR. CASTRILLI: Well, I recognize that  
12 the thing gets updated.

13 Q. What I want to know is subsequent to  
14 an approval by this Board, probably there are going to  
15 be more amendments to the manual; is that not expected?

16 A. If the decisions relate to the  
17 manual, yes.

18 Q. Well, my question then relates to how  
19 do those revisions get approved, and is there a process  
20 for approving them and is that the subject of Panel 15?

21 MR. FREIDIN: When you say when do the  
22 amendments get approved, do you mean amendments that  
23 may have to be made in order to deal with certain  
24 decisions of this Board--

25 MR. CASTRILLI: No.



1 MR. FREIDIN: --or are you talking about  
2 amendments which are made now since the manual first  
3 was produced and came into use?

4 MR. CASTRILLI: Neither. I am speaking  
5 of the situation post the end of this hearing, a  
6 prediction for which I do not want to make at this  
7 time.

8 THE CHAIRMAN: Well, hold it. You are  
9 going to make a prediction that it will end, surely.

10 MR. CASTRILLI: Yes, I am prepared to go  
11 that far.

12 Q. The question I have is: I am not  
13 certain - and if you can't answer it because it is the  
14 subject matter of a different panel, that's fine - but  
15 if you can answer it, I would be forever in your debt.

16 The process after this hearing is over  
17 when the Board has approved, let's say for sake of  
18 argument, this manual plus "x" amendments to the  
19 manual, what is the process envisioned by the Ministry  
20 for amendments post the end of this hearing and post  
21 the end of the Board's approval?

22 THE CHAIRMAN: Would that not be caught,  
23 Mr. Castrilli, by the Class EA aspect of this  
24 application, subject to any possible bump-up, if the  
25 Minister of the Environment saw fit to say that any

1 future amendments to the Timber Planning Manual might  
2 require an additional hearing of some kind?

3 I mean, how else could it be handled?

4 MR. CASTRILLI: Well, what I am really  
5 asking is: What is the Ministry of Natural Resources'  
6 understanding with respect to that process?

7 Or, more particularly, what's Mr.  
8 Armson's understanding of what the Ministry is  
9 proposing?

10 MR. FREIDIN: Let me take it under  
11 advisement and I think I can get the answer to that  
12 accurately by tomorrow morning.

13 MR. CASTRILLI: I am content with that.

14 THE CHAIRMAN: Fair enough.

15 MR. CASTRILLI: Q. Now, Mr. Armson, I  
16 began by cross-examination with you last week with  
17 Exhibit 58, I suppose it is only appropriate that I end  
18 it with Exhibit 58?

19 A. Would you please identify the exhibit  
20 for me?

21 Q. Sorry, that's your June 3rd, 1988,  
22 eight-page memorandum on the Baskerville Audit?

23 A. Yes, I have it.

24 Q. Now, I understand earlier today Mr.  
25 Freidin advised that there was no summary, to use his

1 exact words: "there was no summary of the meeting of  
2 foresters post the Baskerville report", which was the  
3 subject matter that's referred to on page 2 of Exhibit  
4 58; is that correct?

5 A. No, there was no summary of the  
6 submissions made by unit foresters individually or  
7 collectively to me subsequent to that meeting. That  
8 was the document I looked for and it was not present in  
9 my files.

10 Q. How many unit foresters or others  
11 made submissions to you?

12 A. Some of the responses were aggregated  
13 by, in one instance -- in two or three instances, by a  
14 forester delegated or took that responsibility within a  
15 region. In one region, the regional forester collected  
16 those and they were submitted.

17 So I am not -- would have to go back  
18 through the individual files. I looked through them  
19 and went through them, but I didn't particularly count  
20 numbers in terms of them, in terms of individual  
21 responses or what were aggregated, and they sometimes  
22 didn't say there were 12 people who submitted them, and  
23 they may have said: This was the essence of the  
24 response, and so on.

25 I could undertake to look at that if

1       it's...

2                   MR. CASTRILLI: Well, Mr. Chairman, in  
3       light of the fact that no summary was produced,  
4       firstly, it doesn't seem that there could have been  
5       more than 70, I suppose, to begin with - since only 70  
6       people attended the meeting - and, secondly, since  
7       apparently Mr. Armson's testimony is that an awful lot  
8       of the responses he received were in fact an  
9       aggregation of the submissions of unit foresters to  
10      either their district or their regional managers, that  
11      we are not talking about all that much information and  
12      I would like to make a request at this time that it be  
13      provided to me.

14                  THE CHAIRMAN: Well, Mr. Freidin, you  
15      indicated last time we discussed this matter, or the  
16      witness did, that there was some concern over the fact  
17      that comments contained within this response  
18      documentation might be of a personal nature, might have  
19      to do with topics other than just responding to this  
20      one document and --

21                  THE WITNESS: If I might, Mr. Chairman.  
22      There were, I believe, three submissions that came  
23      personally from the individuals.

24                  In looking at them last week, they were  
25      personal in the sense that they were directed to me. I



1 don't recollect there was anything -- but they were,  
2 as I said, submitted on a personal sense.

3 The others were, if you like, more  
4 official in that they were submitted by a forester or  
5 other person in a region and where, as I indicated,  
6 either a series of sheets of paper in which the  
7 individuals had put down information and so on.

8 MR. FREIDIN: I don't know whether Mr.  
9 Armson received copies or submissions from people other  
10 than the people who were at that meeting at that time.

11 I don't think the answer has any  
12 relevance because my position is that the whole subject  
13 matter of looking at the documentation that Mr. Armson  
14 received before he prepared the action by the Ministry  
15 is irrelevant.

16 MR. CASTRILLI: Mr. Chairman, I just  
17 don't understand Mr. Freidin's position.

18 We can't simply be given nothing during  
19 the course of this hearing except output documents and  
20 not ask questions about what were the inputs to the  
21 output documents.

22 Now, this action plan has been touted by  
23 the Ministry as an extremely important response to how  
24 they have brought forest management up to date in this  
25 province, and it seems to me that the 16-point action

1 plan is fundamental to the Ministry's whole approach in  
2 this hearing, and I think it is appropriate to  
3 understand exactly what the foundation was and what the  
4 inputs were that resulted in such a plan.

5 And I have put that position on the  
6 record before. I was prepared to wait to receive a  
7 summary, but I am not prepared to accept Mr. Freidin's  
8 response. I believe that information is relevant and  
9 should be produced.

10 THE CHAIRMAN: Would you have any  
11 objection, Mr. Armson, of formulating a summary?

12 THE WITNESS: I have no objection at all.  
13 I would be quite happy to formulate a summary from the  
14 documents there.

15 THE CHAIRMAN: Well, Mr. Castrilli, you  
16 were willing to accept a summary, had one been done by  
17 Mr. Armson in the past; it hasn't. If we instruct him  
18 to do one now, based on that input documentation, would  
19 you be content?

20 MR. CASTRILLI: Yes, I would be.

21 THE WITNESS: Yes, I will do that, Mr.  
22 Chairman.

23 THE CHAIRMAN: You are so instructed.

24 MR. CASTRILLI: Thank you, Mr. Chairman.

25 If I could have one moment's indulgence I

1 believe I will be done in about two minutes.

2 Mr. Chairman, subject to the  
3 undertakings, those are my questions.

4 THE CHAIRMAN: Very good.

5 Mr. Armson, with respect to that last  
6 matter we just discussed, you are going to be back in  
7 connection with other panels so you will produce that  
8 information to Mr. Castrilli when convenient, but not  
9 too far down the road, I take it?

10 THE WITNESS: I will undertake, Mr.  
11 Chairman, to produce that for the week after next. I  
12 believe that's when we will be sitting.

13 THE CHAIRMAN: Very good.

14 Thank you, Mr. Castrilli.

15 Ms. Seaborn, are you ready to commence?

16 MS. SEABORN: Yes, Mr. Chairman.

17 MR. FREIDIN: Mr. Chairman, before she  
18 begins. In relation to one of the undertakings that  
19 were given, the two-part one about the forest  
20 management agreement plan, the second one which is to  
21 indicate whether there were any situations where the  
22 land area was reduced as a result of public  
23 involvement, I want to advise that that may be  
24 information which may be very difficult to produce.

25 So I am just saying, I may be coming back

1 and explaining to you what would be involved in  
2 producing that information. It may be impossible.

3 MRS. KOVEN: Mr. Freidin, in the second  
4 request you were talking about, the second undertaking,  
5 I don't think Mr. Castrilli mentioned anything about  
6 the size of the areas, I think he said any changes  
7 resulting from public participation.

8 MR. FREIDIN: Any changes -- you are  
9 saying changes...?

10 MRS. KOVEN: Changes only to the proposed  
11 FMAs.

12 MR. FREIDIN: Oh, and not just related to  
13 the area?

14 MRS. KOVEN: I don't think so. You can  
15 check with him, but I don't think he mentioned the  
16 area.

17 MR. FREIDIN: Perhaps we can clarify  
18 that.

19 THE CHAIRMAN: Mr. Castrilli, you are  
20 still front and centre, temporarily.

21 MR. CASTRILLI: I am sorry, I didn't hear  
22 Mrs. Koven's question.

23 MRS. KOVEN: When Mr. Freidin stood up  
24 and said it might be difficult for him to provide  
25 information to your second undertaking which were the



1 changes -- possible changes to the FMA resulting from  
2 that meeting.

3 MR. CASTRILLI: Oh, yes.

4 MRS. KOVEN: And he said it would be  
5 difficult and he mentioned an example of the area of  
6 land that the Ministry would have been describing in  
7 the proposed FMA, and I don't think you specified  
8 any...

9 MR. CASTRILLI: I didn't specify any type  
10 of change. I was prepared to accept whatever  
11 information indicated that FMAs changed as a result of  
12 direct public participation regardless of what happened  
13 to be-- regardless of what the change happened to be.  
14 Is that...

15 MR. FREIDIN: That helps. Thank you.

16 THE CHAIRMAN: Sorry, Ms. Seaborn.

17 MS. SEABORN: Thank you, Mr. Chairman.

18 CROSS-EXAMINATION BY MS. SEABORN:

19 Q. Mr. Armson, would you agree with me  
20 that historically MNR's harvesting strategy has been to  
21 cut the oldest and often over-mature stands first?

22 A. That has been an underlying  
23 principle.

24 Q. And you would agree with me that that  
25 has been the main strategy in terms of harvesting, cut

1 the oldest first?

2 A. Yes, that's a key one as long, as you  
3 can get to the oldest.

4 Q. And if you could just have a look at  
5 Exhibit 56, the Forest Resources of Ontario, 1986 which  
6 was filed as Document No. 21 to your Panel 2 evidence.

7 A. Yes, I have that.

8 Q. And if you could just turn to page 3  
9 of that document.

10 A. Yes.

11 Q. At the top of the page, if you could  
12 just count down three lines.

13 A. Yes.

14 THE CHAIRMAN: What document is that in  
15 the Panel 2 witness statement?

16 MS. SEABORN: It is -- I am sorry, Mr.  
17 Chairman, it is Exhibit 56 and it was referred to as  
18 Document No. 21 in Panel 2, but it was filed  
19 separately.

20 THE CHAIRMAN: No, I have it. Mr. Martel  
21 is having trouble but...

22 Thank you. We have it now.

23 MS. SEABORN: Q. If you could turn to  
24 page 3. And, Mr. Armson, I was asking you to count  
25 down from the top of the page to the third line.

1 A. Yes.

2 Q. And you will see at the end of the  
3 third line the sentence that says:

4 "In the future, the Ministry of Natural  
5 Resources and forest management agreement  
6 holders will be adopting a prime site  
7 approach."

8 Do you see that?

9 A. Yes, I do.

10 Q. Could you explain briefly what a  
11 prime site approach means?

12 A. Yes. Basically, it relates to  
13 something I have already referred to, and that is to  
14 identifying those areas of land in terms of the  
15 capability of the soil to produce, the extent of the  
16 area, the location of the area with respect to access,  
17 the nature of the species that can be grown there;  
18 these particular attributes and, therefore, for a given  
19 management unit or area - and objectives of management,  
20 one can identify, therefore, in a primeness therefore,  
21 areas that would be a first - not only priority, but  
22 where in terms of investment you would be -- by a  
23 professional judgment, put your investment there.

24 Whether you have three classes or four  
25 classes or two is really not the purpose of the

1 exercise, but to focus on directing investment to those  
2 areas of land based on defined attributes that will  
3 likely bring the owner; that is, the public of the  
4 province the greatest return on the investment.

5 Q. And I understand from Exhibit 56, and  
6 specifically the commentary on page 3, that moving to a  
7 prime site approach will mean modifying the harvesting  
8 practices; is that correct?

9 A. It may in certain areas and it may  
10 not. The decision as to what silvicultural system,  
11 particularly of harvesting would apply, would relate to  
12 the area, the objectives and so on.

13 In itself, it doesn't bring about that.

14 Q. Well, would you agree with me that  
15 one of the purposes of the prime site approach is to  
16 establish what may be termed the new man-made forest.

17 A. On certain of those areas, artificial  
18 regeneration, which has been noted before, is the most  
19 costly in terms of per unit area investment. You would  
20 be focusing on specific areas within the management  
21 forest for that relying on other methods -- less costly  
22 methods which may well involve different types of  
23 harvesting, cutting, yes.

24 Q. And if we go to the second full  
25 paragraph -- sorry, second paragraph on page 3, of



1 Exhibit 56 which starts off with "This strategy..."

2 A. Yes.

3 Q. And according to the Forest Resources  
4 of Ontario it states:

5 "This strategy will enable the Ministry  
6 to establish the new man-made forest  
7 which the forest industry will depend  
8 upon in the future."

9 And then:

10 "However, moving to a prime site approach  
11 will also mean modifying harvesting  
12 practices."

13 Is that correct?

14 A. Yes. As I indicated before, there  
15 will be modification or the use of different  
16 silvicultural systems.

17 Q. Would you agree with me, Mr. Armson,  
18 that a definition, per se, of the prime site approach  
19 does not appear in the Class Environmental Assessment  
20 Document?

21 A. That is correct, I do not believe it  
22 appears.

23 Q. And could you advise me if there are  
24 any procedural directives that exist for unit foresters  
25 relating to the application of the prime site approach?

1                   A. To my knowledge, no, they do not  
2 exist.

3                   Q. However, as we just looked at page 3  
4 of the forest resources inventory of Ontario it  
5 indicates that MNR and forest management agreement  
6 holders will be adopting a prime site approach,  
7 correct?

8                   A. Yes, many of them have already  
9 adopted and it has been a part of the decision-making  
10 process. Introducing the term prime site was to give  
11 it perhaps a greater visibility and to focus management  
12 foresters on that need.

13                  Q. But the definition doesn't appear in  
14 the Class Environmental Assessment and there are no  
15 procedural directives that exist for unit foresters?

16                  A. No, I agree, and I doubt that there  
17 should be procedural directives in that the attributes  
18 and the balance of attributes would vary with the area  
19 and with the objectives for each unit management.

20                  Q. Now, assuming that within a specific  
21 stand of timber the oldest trees do not correspond to  
22 the prime site, who determines whether the older trees  
23 will be cut first or if the timber on the prime site  
24 will be cut first?

25                  A. The manager of the forest, that would

1 be the unit forester.

2 Q. And when you say it is a choice made  
3 by the unit forester, is this choice between the prime  
4 site or going to the oldest first delineated in any way  
5 in the Class Environmental Assessment Document?

6 A. No.

7 Q. Would this be something that is dealt  
8 with in the Timber Management Planning Manual, 1986?

9 A. Not as such. It would be, if I may,  
10 a decision that can only be made by the manager at that  
11 unit level.

12 Q. And presumably at the unit level,  
13 there would be judgment involved in making that  
14 decision?

15 A. That is why we hire professional  
16 foresters.

17 Q. And would you agree with me that a  
18 whole management unit cannot be cut at the same time?

19 A. I am not quite -- do I take your  
20 question literally--

21 Q. Yes.

22 A. --that the entire forest in one  
23 management unit be cut?

24 Q. Well, I mean, that is the proposition  
25 we start with. We have a management unit and a portion

1 of it may be delineated, a portion of it is probably  
2 only going to be set aside for some sort of cutting?

3 A. Within any unit there is a decision  
4 and designation of part of that forest for harvest  
5 cutting, yes.

6 Q. Right.

7 A. So that over time, a large part of  
8 it -- over the rotation age, much of it would be cut.

9 Q. Right. That is fine. And if within  
10 a unit you have older stands but the unit forester  
11 chooses to go to the prime sites rather than to the  
12 oldest stands first, would you agree with me that there  
13 is a potential to lose some older or over-mature  
14 stands?

15 A. There is -- if there is a decision to  
16 go to mature rotation age stands rather than  
17 over-mature, older -- the oldest stands, that would be  
18 a decision made in the light of the circumstances  
19 pertaining.

20 And, in that sense, a decision -- a  
21 management decision could be made about the over-mature  
22 stands, whether to let them deteriorate and regenerate  
23 in the different manner or whether to apply some  
24 treatment that would bring them back without  
25 harvesting.



1                   Q. Well, then that decision, though, to  
2 go with a prime site rather than an over-mature stand,  
3 could result in the loss of an amount of timber?

4                   A. Oh, I would respond by saying this:  
5 Age of stand and prime site are not oranges and  
6 oranges, they are two different elements.

7                   The age of the stand is one of the  
8 features and one of the key pieces of information that  
9 we deal with. The prime site concept, if you will, and  
10 using -- employing that is within that context of the  
11 existing forest.

12                   You are not making a choice between going  
13 to a prime site or an older stand, you are directed to  
14 the mature stands of rotation age and whether you cut  
15 them on prime sites or on non-prime sites, if you want  
16 to put it that way, is a judgment decision that is made  
17 in terms of the management process.

18                   THE CHAIRMAN: Well, clarify this: If  
19 you are going to the prime site methodology, will you  
20 be cutting, in a particular management unit, on prime  
21 sites and, in addition, on non-prime sites, or will you  
22 just be restricting your cutting to prime sites if you  
23 are on that methodology?

24                   THE WITNESS: I don't know of any unit in  
25 the province, Mr. Chairman - and I think I have been on

1 many of them - on which you would be only cutting on  
2 "the prime sites."

3 I can't think of any area that would be  
4 in that category.

5 THE CHAIRMAN: So you would be harvesting  
6 some older stands in any event--

7 THE WITNESS: Yes.

8 THE CHAIRMAN: --even if you were on the  
9 prime site already?

10 THE WITNESS: That's correct.

11 THE CHAIRMAN: Thank you.

12 MS. SEABORN: Q. I guess my problem, Mr.  
13 Armson, with this is that according to the 1986 Forest  
14 Resources of Ontario, we are told that the Ministry's  
15 strategy is to move toward this prime site approach.

16 A. Yes.

17 Q. And my understanding is that the  
18 definition of a prime site approach, it's something  
19 different than cutting oldest first; those are two  
20 different concepts?

21 A. No, they are two concepts but there  
22 is a linkage between the two. The cutting of the  
23 oldest first is a basic tenant. Whether you cut the  
24 very oldest first or you decide to cut the mature and  
25 rotation aged stands, a certain proportion on what we

1 will call prime sites and the remainder on other areas,  
2 that balance and how that is done will be, to a very  
3 large degree, dependent on (a) whether you have a  
4 knowledge of the land base that enables you to identify  
5 that - and, as I indicated, two of the regions have  
6 done that regionally.

7 Secondly, whether in fact the access to  
8 the prime sites that you wish to treat -- harvest or  
9 the oldest stands is there, and that may not be there  
10 or you may plan for it to be there in some period of  
11 time.

12 And then, third, what the management  
13 objectives are in relation to the nature of the forest  
14 and how -- what kinds of stands you want to create,  
15 again, in terms of the management -- long-term  
16 management objectives.

17 Q. Well, Mr. Armson, I am going back to  
18 my question. You have referred to the unit forester  
19 making the decision of cutting the over-mature trees or  
20 cutting the mature trees, say, at rotation age.

21 Now, wouldn't you agree with me that if  
22 the unit forester made the decision within a stand, and  
23 you are not going to cut the whole stands at once, you  
24 told me that --

25 MR. FREIDIN: No, he didn't.

1 THE WITNESS: No, I didn't say that. I  
2 said the whole forest. The word was "forest" and that  
3 is why I had some problem with the question.

4 MS. SEABORN: Q. All right. I agree  
5 with that clarification.

6 If you then go to the over-mature and  
7 then the prime site. Now, if the unit forester made  
8 the decision to cut the prime site first and left the  
9 over-mature within a stand, wouldn't you agree with me  
10 that you may, for whatever reason, lose those  
11 over-mature trees?

12 A. You may. The over-mature trees may,  
13 in fact, be on a prime site though.

14 Q. Well no, I think we dealt with that.  
15 I am talking about the situation where the over-mature  
16 and the prime site are not necessarily the same thing.

17 A. That's correct, and the decision  
18 might well be to cut at a rotation age on a prime site  
19 and regenerate it to a higher growth rate and to, in  
20 fact, leave the over-mature stand somewhere.

21 Q. Exactly. That is all I am asking you  
22 to do.

23 A. That's correct, that could be done.

24 Q. That could very well be done?

25 A. Yes, and is done.



1 Q. Okay. And would you agree with me  
2 that over-mature stands exist in many management units  
3 within the boreal forest?

4 A. Yes, they are quite common.

5 Q. Now, earlier when we talked about the  
6 Forest Resources of Ontario, 1986 and the movement to  
7 the prime site approach, I think we agreed that in  
8 Exhibit 56 it's stated that:

9 "Moving to a prime site approach will  
10 also mean modifying harvesting  
11 practices."

12 A. That's correct. That is the  
13 statement in the document.

14 Q. Could you tell me how you would  
15 modify harvesting practices to accommodate the  
16 approach?

17 A. Well, it would mean that if you were  
18 and this is quite - kind of a relevant example - if you  
19 were going to focus your attention on certain prime  
20 sites, normally they would be ones that you would  
21 artificially regenerate.

22 And areas that currently we maybe now  
23 harvesting in a certain way and artificially  
24 regenerating but which, we would now and in the future,  
25 identify as not prime sites, we would look to a

1 different way of harvesting and perhaps much lower cost  
2 of harvesting on those areas.

3 In fact, many examples exist of that type  
4 of thing being done by foresters who perhaps never  
5 thought of it in terms of the concept of prime site.

6 Q. I just want to touch for a moment,  
7 Mr. Armson, on the over-mature forests from the point  
8 of view of non-timber values.

9 A. Yes.

10 Q. Would you agree with me that there  
11 are intrinsic values associated with the over-mature  
12 forest and, for example, jack pine and black spruce  
13 stands support woodland caribou, and spruce grouse as  
14 an example?

15 A. Yes, I would. The spruce grouse, I  
16 understand is a bird and there have been studies of  
17 this of which -- that commonly is not more prolific in  
18 young jack pine stands than old stands.

19 Q. And another value that you might  
20 associate with the over-mature forests would be a park  
21 value or a tourism value?

22 A. Park values, I believe, are dealt  
23 with in terms of park areas, the recreation and tourism  
24 values. Yes, they would apply to these areas.

25 Q. And would you agree with me that

1       according to MNR's philosophy of integrated resource  
2       management, these values must be taken into  
3       consideration prior to harvesting the over-mature  
4       forest?

5                   A.   Yes.

6                   Q.   And according to integrated resource  
7       management, there may be legitimate reasons not to  
8       harvest over-mature timber?

9                   A.   Yes, I agree.

10                  Q.   And would you agree with me that the  
11       main reason for harvesting over-mature timber is to  
12       salvage as much timber as possible based on economic  
13       values associated with the resource?

14                  A.   Not alone because, as I indicated,  
15       sometimes we harvest those over-mature areas which are  
16       on very productive sites and where we can then  
17       regenerate it to a new forest which will be, in effect,  
18       more productive.

19                  Q.   But, again, you are associating the  
20       over-mature timber with an economic value--

21                  A.   Oh, yes.

22                  Q.   --aren't you?

23                  A.   In terms of production of timber,  
24       yes.

25                  Q.   If you could turn, Mr. Armson, to

1 page 172 of the Panel 2 evidence.

2 A. Yes, I have that page.

3 Q. And in questions put to you in  
4 cross-examination by Mr. Williams, you refer to the  
5 fact that three major types of forest are subject to  
6 various forms of planning and, as I understand, these  
7 three major types of forests are referred to at page  
8 172 of the evidence.

9 A. Yes, those are areas that I described  
10 in my report of 1976.

11 Q. And the first area that was  
12 identified were areas where production of wood is the  
13 primary objective?

14 A. Correct.

15 Q. If you could turn now to, again, the  
16 Forest Resources of Ontario, 1986.

17 THE CHAIRMAN: 56. Exhibit 56?

18 MS. SEABORN: Yes, Mr. Chairman. Thank  
19 you.

20 Q. Page 18. And page 18 includes Figure  
21 7 which shows classification of the province into broad  
22 land classes. Do you have that in front of you, Mr.  
23 Armson?

24 A. Yes, I do.

25 Q. Thank you. Now, as I understand, the



1 first chart tells us that there is a total land area of  
2 53.1 million hectares and then a percentage of which is  
3 classified as productive forest?

4 A. Yes.

5 Q. And the chart at the bottom of the  
6 page then takes this productive forest and splits it  
7 into three categories?

8 A. Yes.

9 Q. One called protection forest, one  
10 called production forest reserve and another, and by  
11 far the largest one, called production forest.

12 A. Yes.

13 Q. Now, if you could turn to page 175 of  
14 your evidence, just keeping those classifications in  
15 mind, and again we are dealing with your 1976 report,  
16 and Mr. Castrilli pointed you to this chart that was  
17 included as a portion of your report?

18 A. Yes.

19 Q. And as I understand your testimony,  
20 this was a chart that you received from MNR and the  
21 source for the chart is the 1976 Forest Production  
22 Policy options for Ontario?

23 A. Yes, that's correct.

24 THE CHAIRMAN: That chart is not on page  
25 177, what page are we on?

1 MS. SEABORN: I am sorry, Mr. Chairman,  
2 page 175.

3 THE CHAIRMAN: Sorry. Thank you.

4 MS. SEABORN: Q. All right. I just want  
5 to put this chart that was taken from the Forest  
6 Production Policy in the context, if we can, of your  
7 report.

8 Now, if you look further up the page on  
9 page 175, I understand that you were dealing with the  
10 area we described as the first forest and, in  
11 particular, you were dealing with areas where  
12 production of wood is the primary objective.

13 Are you with me?

14 A. Not quite. You are making a  
15 connection from page 172 to 175, I believe?

16 Q. Yes, if you see it at 175, No. 1 in  
17 the middle of the page.

18 A. Yes.

19 Q. Sorry, page 172, No. 1 in the middle  
20 of the page. Do you have that?

21 A. 170...

22 Q. 172, No. 1.

23 A. Yes, right. No, I have that one and  
24 now you want to link it to a statement on page 175?

25 Q. No, I just want to make the point

1       that the point in -- the stage in your report at which  
2       we reach this chart was you were dealing with still  
3       Item No. 1?

4                   A.  No, I was dealing with the total area  
5       and the chart on page 175 was put in there --

6                   Q.  No, just stop for a second, Mr.  
7       Armson.  I think you are trying to anticipate a  
8       question.  All I am saying is that in terms of how you  
9       set up this report--

10                  A.  Yes.

11                  Q.  --you said you were going to talk  
12       about three major areas.

13                  A.  Correct.

14                  Q.  Three forests we have called them.

15                  A.  Right.

16                  Q.  Now, the discussion under forest No.  
17       1 starts at page 172 and the discussion of forest No. 2  
18       starts at page 177.

19                  A.  Yes, I understand.  Yes, I understand  
20       what you are...

21                  Q.  So the chart falls under the  
22       heading -- under the first heading.  I am not trying to  
23       imply there is some sort of magic in the link there, I  
24       am just saying that this is where it falls in terms of  
25       your organization.

1                   A. Yes, that's correct. It has no -- it  
2 isn't specifically only information relating to item  
3 No. 1. I think that is the point you are making.

4                   Q. Yes.

5                   A. And I agree.

6                   Q. And if we could just return then to  
7 page 175.

8                   Now, as I read your report, at this stage  
9 you were making the point that in the context of  
10 regeneration, that for the manager the prime concern  
11 should be to select those areas of greatest potential  
12 for management and for the remaining portion of the  
13 forest estate differentiate between forest lands that  
14 can be exploited by logging and which will revegetate  
15 with no essential degradation of the site and those  
16 areas where logging will result in permanent damage?

17                  A. Yes, I am.

18                  Q. And as I understand it, as an  
19 illustration, we then go on and look at the  
20 approximation that you took from the 1976 Forest  
21 Production Policy option?

22                  A. Correct.

23                  Q. And looking at the chart, the total  
24 productive forested land was estimated to be 82.2  
25 million acres; is that correct?



1 A. That's correct.

2 Q. And then, as you discussed with Mr.  
3 Castrilli earlier, specific deductions were made for  
4 parks, park reserves, proposed wilderness areas,  
5 special wildlife areas?

6 A. Yes.

7 Q. Then you also deducted something  
8 called deductions for protection forest, and there are  
9 three headings you included and No. A is fragile sites  
10 (no cutting allowed).

11 Could you tell me what would be meant by  
12 fragile -- what was meant by fragile sites at that  
13 time?

14 A. I had great difficulty in determining  
15 what exactly was meant. My recollection was that it  
16 was a designation that had been applied by the persons  
17 preparing this report, that in their view meant that  
18 there could be degradation, and I had used that word -  
19 I don't say that they had - but areas that were  
20 sensitive such that cutting might in fact, from what I  
21 guess we would say an environmental standpoint, result  
22 in degradation. That was my general understanding.

23 The specifics, I can't tell you what  
24 the -- there was no definition given in words that I'm  
25 aware of, or can recollect in that document.

1 Q. And as I understand it, Mr. Armson,  
2 your testimony in response to Mr. Castrilli's questions  
3 were that you never went behind the 1976 document in  
4 order to ascertain what they meant when they used the  
5 chart?

6 A. I didn't go behind it.

7 I was looking for some order of magnitude  
8 at that time and I wasn't really interested in going  
9 into a discussion of whether it should be five or six  
10 because I had no idea what the number should be.

11 Q. And do you have any information or  
12 definition that you can give me of the portion of site  
13 Class 3 is considered too poor for timber production?

14 A. No, I would respond in the same way  
15 about the fragile. I had -- the proportion was an  
16 estimate made by one or more individuals in the  
17 Ministry at that time and I don't know the basis for  
18 it.

19 Q. I take it your answer would be the  
20 same with respect to other?

21 A. Yes, very much so.

22 Q. Okay. Now, would you agree with me  
23 that the items under deductions for protection forest  
24 would be areas that would be able to be defined by  
25 physical parameters, whereas if we look at the

1       deductions for parks, park reserves, proposed  
2       wilderness, those would be areas where you are looking  
3       at projections?

4               A.   Well, you are looking at a different  
5       set of criteria for parks than you would be -- I would  
6       agree with your first statement, that presumably the  
7       way in which you would arrive at that number and  
8       whether it was fragile would be based on some objective  
9       criteria.   I agree with that.

10              Q.   And would you agree with me, Mr.  
11       Armson, that the accepted definition of protection  
12       forest in 1976 would be the total of fragile sites, the  
13       portion of site Class 3 considered too poor for timber  
14       production and other, whatever that means?

15              A.   They use that term and lumped it  
16       together and I accepted that.

17              Q.   And so you accepted in 1976 that that  
18       was an appropriate definition?

19              A.   It was what was given to me.   I  
20       didn't query whether it was appropriate or not.   I  
21       accepted it merely as a statement by the Ministry staff  
22       of that breakdown.

23              Q.   But you also accepted it as a  
24       definition -- as an MNR definition of protection  
25       forest?

1                   A. Yes, I didn't question whatever  
2 definition they had.

3                   MS. SEABORN: Mr. Chairman, I have one  
4 other area, and rather than starting this afternoon, if  
5 I could be permitted to begin at 8:30 tomorrow morning,  
6 I think I could finish in half an hour or so.

7                   THE CHAIRMAN: Very well. Then we will  
8 proceed right after that with the discussion of the  
9 site visits.

10                  MS. SEABORN: Thank you.

11                  THE CHAIRMAN: Thank you. The Board will  
12 adjourn until 8:30 tomorrow morning.

13 ---Whereupon the hearing adjourned at 5:15 p.m.,  
14 to reconvene on Friday, June 17th, 1988, commencing  
at 8:30 a.m. (Copyright, 1985)









